SOIL CONSERVATION

HEARING

BEFORE THE

SUBCOMMITTEE ON SOIL AND WATER CONSERVATION

OF THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY UNITED STATES SENATE

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SOIL CONSERVATION

MONDAY, AUGUST 31, 1981

U.S. SENATE,
SUBCOMMITTEE ON SOIL AND WATER CONSERVATION OF THE
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Burlington, Iowa.

The subcommittee met, pursuant to notice, at 1:02 p.m., in the council chambers, city hall, Hon. Roger W. Jepsen (chairman of the subcommittee) presiding.

Present: Senator Jepsen.

Also present: Senator Grassley.

STATEMENT OF HON. ROGER W. JEPSEN, A U.S. SENATOR FROM IOWA

Senator JEPSEN. This subcommittee hearing on soil conservation will please come to order. Can you hear me in the back? I welcome all of you today to the soil conservation hearing held by the U.S. Senate Subcommittee on Soil and Water Conservation. As chairman of this particular subcommittee, I am anxious to hear the views of the witnesses that are here today.

Let me begin by briefly outlining why we are conducting these hearings and what we hope to accomplish. Before I call the first witness, I want to introduce to you the staff members who are seated here with me today. Dick Chambers, who is just closing the door, is the field representative from Davenport, retired Ford Motor Co. executive, who joined my staff here a few months ago.

Rex Tracy to my immediate left works with me in Washington on soil conservation legislation. Rex is a native of Illinois. He grew up on a grain and livestock farm in Logan County between Lincoln and Springfield and has had nearly 20 years experience in soil conservation work at varied locations around the United States.

Soil and water conservation is an issue which affects each and every one of us in this room. Secretary of Agriculture John Block has described the current situation as a crisis in the making. President Reagan has said that stewardship of our soil and water is a national responsibility. And when Iowa Soil Conservationist Gene Renken says that there is land in Iowa that will be out of farming in the next 25 years because of soil erosion, it certainly brings this national issue closer to home.

Every year this country loses the productive capability of 1 to 1½ million acres of farmland because of erosion. That's the equivalent of

wiping out more than six cities the size of Chicago. Enough land is lost each year to feed, clothe, and provide lumber for a population the size of San Diego. It would take a train of freight cars long enough to circle the earth 30 times to move the 5 million tons of soil being washed and blown away from cropland each year.

American agriculture has been rightfully described as the marvel, envy, and hope of a hungry world. It was so described by Dr. Stanley Curtis, professor at the University of Illinois College of Agriculture. But we can maintain this respected position only through our conscientious use and care of the land. I don't have to tell Iowa farmers how important good soil is.

Even though we have only 5 percent of the Nation's prime farmland in Iowa, our State leads the Nation in producing corn, soybeans, and pork. However, if we are indeed to be the hope of a hungry world, we have a responsibility we should not take lightly. We may lead the Nation in corn, soybean, and pork production, but we also have the dubious distinction of leading the Nation in the amount of soil lost through erosion. Larry Vance, who was the director of Iowa Department of Soil Conservation, recently selected for a similar position in Ohio, put this information in terms we all understand, and that's m-o-n-e-y, money. Iowa loses approximately 9.9 tons of earth for every acre each year. That would fill up two single axle grain trucks, and with soil selling for about $60 a load at the present time, that means we're losing a $120 for every wasted acre. Multiply that by the 26 million acres lost to erosion each year in Iowa, and that means we're losing about $3 billion a year in valuable topsoil. We cannot afford to let this type of erosion continue. That is why we all assembled here today.

Iowa is setting the example as a leader in innovative programs to help prevent soil erosion, and we want to provide that kind of leadership at the national level. But we need fresh, new ideas from you to do this. Most everyone would agree that we don't need more land studies. The time for studies has run out. We have 42 years of them piled up in Washington and we should now concentrate on utilizing the information which is available. We need to take advantage of the creativity and the potential for which this Nation is famous and use it in helping us solve the soil loss problem. We have the know-how and we have the facts, the figures, and studies, so let's utilize these resources just as we should be utilizing our natural resources.

Iowa has already made a refreshing commitment to reduce soil losses through its Iowa Soil 2000 program. This was the first program of its kind in the Nation, and I am pleased that we took the leadership in developing an aggressive erosion control program to maintain the productive capacity of our land and improve the quality of our water. We need more programs like the Iowa Soil 2000 across the country. Some State soil and water conservation in developmental stages are already using Iowa Soil 2000 as an example.

We are also encouraged to hear that conservation tillage, including no-till, farming is on the increase. That has proven to be an excellent way to control erosion as well as save energy and time as well as reduce soil compaction. About 2 weeks ago in southwest Iowa, someone said

that no-till and minimum-till save soil, toil, and oil. In my opinion we need to spread information about no-till. And again in my opinion, I feel that the Federal Government should take the leadership in demonstrating the value of no-till. I have asked the President to see that all military cropland leased back to farmers be farmed using no-till. Targeted critical erosion areas have been identified around the United States, and that is encouraging because we need to zero in on the real problem areas and concentrate on reducing erosion down to 5 tons or less per acre.

The 1981 farm bill, with which I'm not entirely pleased and am somewhat embarrassed to say, has not yet passed. When it is passed, it has incorporated provisions to guarantee some effort toward the soil conservation ethic. Hopefully it will pass soon and the critical problems receive the attention which is so badly needed. Recently I met with John B. Crowell, the Department of Agriculture's Assistant Secretary for Natural Resources and Environment. The meeting was excellent, and we agreed to continue working together on new initiatives that can help solve the soil and water conservation problems. Today we are here to listen to you, to listen and to learn. Your testimony, your suggestions and comments, will be very, very valuable.

Rather than force-feed you a diet of Government proposals you don't want or can't afford, I'd like you to speak out and share your ideas and suggestions with this subcommittee. Once local people like you tell us what needs to be done, this subcommittee can study the effectiveness of the USDA conservation programs. We also need to know where and where not to tinker with effective programs and practices. The old adage don't fix it if it isn't broken certainly applies here. Iowa can provide, as it already has, an example for others to follow. Your messages and statements will be taken back to Washington and published for the committee to use and the public to read. Your testimony will add weight to our case for soil conservation and make Congress pay attention to needed legislation.

The only thing that could be more effective than your testimony would be a dramatic, real-life situation similar to the one that caused the birth of the Soil Conservation Service. Some have heard this before. Bear with me because I think it is worth repeating. On April 2, 1935, the afternoon sky suddenly darkened over Washington, D.C., as a swirling cloud of dust blew in from 2,000 miles inland. For Hugh Bennett, who was at that time testifying before the Senate when the storm appeared, the disaster of the Plains was a tragic vindication of his repeated warnings about soil erosion. This event brought vividly to mind our earlier failings to conserve soil. Hugh Bennett, then head of the USDA Bureau of Soils, had to wait for this devastating act of nature to be able to convince the politicians and the bureaucrats that a permanent soil conservation program was needed. The East's city dwellers could only stand the grit in their teeth for 25 days, because that's how long it took them to establish an organization to help deal with the devastating problem. When Congress directed the Secretary of Agriculture to create that organization, the Soil Conservation Service, interestingly enough it was done that very same day. I don't think we can effect changes that quickly in this day and age. The problem, however, has not lessened at all, and we cannot afford to ignore the

seriousness of it any longer. We must come to grips with the future now in order to have a future. These hearings provide an excellent start.

Because there is a very full schedule of witnesses today, we have asked that statements be limited to 10 minutes. My staff will set a time limit. When the bell rings, you will know 10 minutes have passed. We thank you for your assistance in this matter. You may have your statement placed in the record as if read. You may do so if you wish and then summarize and discuss certain points. Rest assured that not only will your summary be in the record, but your statement will also be a part of the record. I know that everyone will want to adhere to the time limit in order to be fair to all the witnesses and to those in the audience. We want to have ample time for questions. Give and take is the way learning takes place. The purpose of these hearings is to present testimony, to listen, to record and to gather information from your presentations.

If anyone in the audience wishes to ask me or any other panelist a question, we would like you to stand up and clearly state your name and your full address for the record. It is important to know how you can be reached to make sure your comments are recorded accurately. Finally, it's good to see a friend from Illinois and a friend from Missouri who will testify today. Each of the witnesses represent a statewide association of soil and water conservation districts from their respective States as president of that State's association. Harry Scurr, president of the Iowa Association of Soil and Water District Commissioners will also be a witness. We welcome our neighbors and we appreciate your taking the time and effort to participate. Thank you very much.

We are ready to call our first witness, George Gollinghorst, of Scott County, who is my neighbor. He is from Walcott, Iowa. George, you have been a soil conservation district commissioner for many years. We value your judgment greatly. I can recall our working together.

STATEMENT OF GEORGE GOLLINGHORST, COMMISSIONER, SCOTT COUNTY SOIL AND WATER CONSERVATION DISTRICT, WALCOTT, IOWA

Mr. GOLLINGHORST. Senator Jepsen, I wish to thank you for the opportunity to visit with you this afternoon. I have read the proceedings of the Congressional Record of Thursday, July 16, 1981. From that I know that you understand the real problem, finding the answer is not easy. A year ago I mailed to you a paper expressing some of my views on soil conservation. In a closing paragraph I mentioned spending my first soil conservation dollar on soil research. I still believe that. This Nation is running out of time and we must find some methods to slow down soil runoff. Many farmers are doing an excellent job with no-till planting. This takes a higher degree of management. Time of application of herbicides, soil type, temperature, humidity, and rainfall are a few of the conditions that seem to play a part in the herbicides' effectiveness. No-till takes some blame for more insects and diseases. I'm not convinced of that, but through

research we must find some answers. We must show the producer that it is more economical to grow row crops in this manner.

While there are other good management practices, they seem to be harder to sell on a large scale. To control soil erosion from water runoff, it is a matter of water management. This is where terraces and other permanent structures come into use. We should remember during any heavy rainstorm some of the water is absorbed by the earth. After that the water starts to build up and runs to a lower level. As the water builds and becomes deeper, the faster it runs. The faster it runs, it creates a turbulence. The greater the turbulence, the greater the carrying capacity of the water. With terraces we slow down the rate of water runoff and the soil filters out and stays on the farm. It also reduces the flooding in low-lying areas, for it is the excessive water that usually does the damage. It is important that every incentive be used to get our land protected.

I have heard farmers complain about the manner in which the IRS handles the posture of money. In Iowa the first cooperator pays all the cost for a project. Then he is reimbursed 50 percent cost share. IRS will let him depreciate the first cost, but then he must pay tax on the cost share money. We feel the cost share money should be deducted from the cost and the remainder depreciated. In your soil and water conservation incentive bill, S. 569, you ask for a 10-percent-investment credit. In the new tax law a 25-percent-investment credit is allowed to rejuvenate a historical site. Why not soil? Here we set priorities. It seems to me that if the Federal Government wants to get serious about conserving the soil resource, then they should tell the private landowners if you have the funding to install permanent soil conservation practices you should contact your local SCS office, discuss your plans with them, and have them either survey the area that you wish to protect or at least get the specifications that are required.

After that you have a reliable contractor complete the job and a district soil conservationist approves the work and you agree to maintain these terraces for 20 years. The Federal Government would allow a 25-percent-investment credit with a 3-year-depreciation writeoff. The people participating in this one may not be that great in number, but it would create jobs and protect more acres. These people, however, would not qualify for cost share moneys. Congress would not have to appropriate money for these people and Government could save administrative costs and interests on these moneys.

What about the operators who really need help through a cost share program? In 1980 Scott County received Federal funds of $48,727 from ACP funds plus $7,000 on a long-term agreement and $35,000 from the county supervisor. They had received the moneys from Federal Government through the Rural Improvement Act, a total of $90,827, to be applied on approximately 80,000 acres of row crop that need protection, a little over a dollar an acre, and yet we have been criticized because we are not getting the job done.

It was interesting to see the beautification of a city block in downtown Davenport in 1980. It was also interesting to see six financial institutions within a block of this area. According to the news media, it was well over a million dollar project and yet the officials I contacted couldn't remember the cost. Although they said it was 80 per-

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cent cost share, I was told not to be critical because the Government looked at the number of people that were served. Let us not forget that every American is dependent upon our soil resource. I hear the word mandate occasionally, yet in many cases I wonder where the funding will come from. In a letter to President Reagan, Secretary of Agriculture Block informed him that farm income fell 40 percent in 1980, the lowest since 1930 in deflated dollars. Today agriculture is in debt to $200 billion. By 1990 it's estimated with a 6-percent inflation it will be $600 billion. If agriculture must serve on borrowed money, there won't be many dollars spent on soil erosion. And, incidentally, this spring we had farmers come in for ACP money, and we are willing to go forward, but the administrator has informed me that they are starting to cancel out since we had a drop as high as 90 cents a bushel for corn, so right away prices affected the attitude of the farmer, but, you know, it's little wonder.

Let me give you an example. I walk up to a vending machine for a can of cola. The ingredients might be carbonated water, caffeine, flavor, and sugar. If someone tells me the can costs as much as the contents, I probably would believe that. At 45 cents for 12 ounces, it figures out to $4.80 a gallon, and the public is drinking it up by the truckload. I can go into a grocery store and pick up a gallon of milk, nature's most perfect food, 2 percent fat plus vitamins for $1.68, and you can raise a baby on it. Yet the public says food costs are too high. I think of the contribution that agriculture makes to society, and yet the average person hasn't even thought about it. I really feel a tax should be collected at the checkout counter to support the soil conservation program, but that's another story.

Our country must not lose the advantage of being able to produce food and fiber in such vast amounts. This is one area where our people can still compete on a world market, which is reflected in our standard of living. While there are vast acres of productive land in the world, we must remember that we have the climatic conditions for this production. When we look at the life of a nation, this is one area where our Government can make a capital investment with tax dollars and receive a longtime payback. This is difficult for an individual to do. Once the soil has been eroded an unproductive government can no longer use this for a tax base. Senator, while there are many other areas I would like to discuss with you, I only hope at these public hearings you have picked up some good ideas for we must find the answers. It will be sure death for our Nation if we keep taking our fertile soil for granted.

Senator JEPSEN. Thank you, George. Those were very interesting comments. One of the actions that must take place is tell the story and sell it with persuasion. This is one way to describe salesmanship which is actually the art of persuasion. That must be done through communications. Before going any further I want to thank the press who are working here today. We depend on them greatly to help tell the story. It is important to provide interesting analogies which readers will find refreshing. You provided such a comparison with the can of cola versus the gallon of milk. It makes one stop and think. Also, you suggested that a tax should be collected at the food checkout counter, similar to a checkoff system. Soil conservation is everyone's

business. That was another point which is important and I can tell you it is being looked at very hard. I want to say some of you may have attended or participated in the soil conservation hearings, held in Iowa within the last 2 years.

The same question was asked which I'm going to ask each witness today. That is, do you think soil conservation should be mandatory or voluntary? We have a growing concern for the fact that soil conservation practices, even in critical areas, that need to be put into place have not been constructed. One of the reasons is that farm profits have not been high enough. As your representative, serving the people of Iowa, I do understand that any business, including farming has to have a profit. The farmer has to have profit to pay for the soil conservation practices. He then, and only then, may obtain tax incentives and other advantages. If there is no profit, tax incentives are of no value.

Mr. GOLLINGHORST. Right.

Senator JEPSEN. I want you and others to know that I understand that. That bottom line is very important in this endeavor. Now, with that having been said, I would like to ask you, George, do you feel that soil conservation should be mandatory or voluntary?

Mr. GOLLINGHORST. I'm not ready for mandatory soil conservation as yet, because, as I said earlier, I was rural commissioner, and as I look in the past, I don't think the Federal Government has gotten serious about supporting soil conservation yet. When I look starting back 30 years—and I don't know whether I've got time to explain all this, but 30 years ago, you see, we had the ACP program, and at that time I just forget what the appropriation was, it was either $160 or $190 million, and that figure hasn't changed much yet, and now when we go back 30 years ago, of course, we had smaller farms and more farmers, and at that time the thing what they did they would go to work and give this farmer a few dollars for clover seed, somebody else for limestone, and maybe a little tiling money, so then we kept everybody happy.

Well now, the economics change, and some of these smaller farmers left the land and the farms got larger, and we used to have livestock around, and we had crop rotation, we had cross fences, and because of the changing situation in the world for demand of grain, these fences came out and a lot of trees came out, and it was all a matter of water management to a degree, you see, and since then it's been full production, and, of course, we know the story, I would just like to go back, everytime we had a new administration come in, except the last one, the President, would say, well now, we are going to cut the budget or we are going to balance the budget. The first thing he would do is take out the ACP payments, the way I recall, because he knew Congress was going to install them anyway, this is past history, until about 6 or 8 years ago I recall that the Budget and Management sat on 1 year's appropriation. And since we had a voluntary program, I had a young neighbor that went forward with a project because we thought money was going to be available, but it wasn't, so then the next year by an act of Congress to release the money and we had 2 years of money, and how can we run a voluntary program with that kind of a setup.

Senator JEPSEN. I hear what you are saying. I want to ask just one additional question, exploring your answer, and I'll tell you why at the end of the day why I'm doing this. You said you are not ready for mandatory practices yet. What does "yet" mean? Are you thinking about it?

Mr. GOLLINGHORST. Only because I hear it quite often, and it bothers me. It will have to be policed, and who's going to police it, and there's a lot of factors that enter into it that worry me a little bit.

Senator JEPSEN. Thank you very much, George.

Senator Schwengels, Forrest V., better known as "Frosty." Senator Schwengels has been a leader in soil conservation in the legislature and around the State for many years, and a very effective one I might add. He's a man that gets things done.

STATEMENT OF HON. FORREST V. SCHWENGELS, AN IOWA STATE SENATOR, FAIRFIELD, IOWA

Senator SCHWENGELS. Thank you, sir. First of all, Senator, I would like to express my appreciation to you and your staff for this continuing effort for Iowa soil and soil conservation in general. I think your efforts are going to pay off, and I think that you will go down in the books for being one of those who provided the wherewithal to keep this way of life of ours in Iowa going, and I appreciate it.

Before I start, I would like to tell you and the others that the National Conference of State Legislatures has now taken on a study of natural resources problems and have been funded by the Mellon Foundation. I'm fortunate to be selected to that particular advisory council because of my soil conservation background, and I hope to keep your office informed of the kinds of things that they come up with. Another thing, to indicate the kind of thing that's happening, I think, across America related to soil is the fact that the Joyce Foundation has recently given the Conference of State Legislatures a grant to provide for a soil conservation conference in mid-America. We hope that will be in Iowa because, I think, that's about as mid-America as you can get. We think we are going to try to make that for Des Moines, late sometime in May 1982.

My remarks will be relatively brief because what I said at the last hearing relating to Iowa Soil 2000, I think you can tell is all still very valid. I think it's more obvious than ever that the imperative of saving the Iowa soil and soil across this Nation is of the highest priority. I think people at all levels are beginning to see and understand what the soil conservation problem is. It used to be that we had problems in the cities for people to understand this. I think because they are able to understand this problem they are also willing to provide support. I think the time is right for political support in this area.

Not too much more we need to know about how to take care of the soil. The techniques, as you pointed out earlier in your remarks, are mostly there. We have some things yet to learn about tilling practices, particularly about no-till, and perhaps that will be one of the major ways in the future that we will be addressing our soil conservation problem. However, I think what is needed now is that final, final

economic incentive, final economic push. If this could come for Iowa with an appropriation of about $5 billion, which will handle our problem, we could probably spend that over 10 or 15 years and finish up our work, but that's not likely to happen, and I think both of us realize that, but I do think our cost share ought to be increased and Iowa cost share ought to be increased and continued for permanent practices that we now carry on with incentives built in for people to begin no-till.

I think more than that we need to turn to a continued and increased look at the kinds of things that we call either tax credit or investment credit. I am very, very happy to see that you and one or two others in the Congress are supporting this concept. I think this is the easiest way we can buy more soil conservation at this point. I would hope that the bill that I've introduced in the Iowa Legislature which will provide a 50-percent-cost-incentive-tax credit for soil conservation would have some kind of success this year. It would be helpful to me if you could pass your bill and at about a 20-percent level and tie it to a necessity for the State to do the same kind of thing, and it would really get rolling the soil conservation.

I would suggest that there wouldn't be enough equipment left or available to get the job done. The Department of Agriculture at the Federal level and the State Department, I think, need to become more aware of the actions—the effect of their actions on agricultural policy related to soil conservation. For instance, when we have to encourage a great deal more production, fence row to fence row, that's not altogether bad, but when we encourage that kind of thing, we ought to, at the same time, at the Federal level realize it's going to have some very, very important effects on our soil conservation problem. When we encourage those things at the Federal level, they ought to be tied directly to some kind of additional education or incentive program to make sure that the increased land that's going into production will somehow get additional treatment.

I think particularly of the problems we have had with dairy in the dairy field and livestock field in this State when things happen at the Federal level. I remember one time a few years ago something happened about freezing the price level of livestock across this Nation, and it was extremely detrimental to the southern part of Iowa where we were raising a great deal of livestock in those days. Those things have got to be considered at the Federal level. I don't know whether Mr. Block is a flatland farmer or a hill farmer, but if he isn't a hill farmer, he ought to come take a look at some of our hill problems as well. That's the main thrust from our side I would like to make today. If you have any further questions, I would like to take a crack at it.

Senator JEPSEN. Thank you, Senator. Tax credit with a requirement of the State to do the same. Do you think that will get things off dead center?

Senator SCHWENGELS. I thought it might stir up some conversation. Senator, I think one of the things we do in this government of ours, both at the State level and at your level, is we reward the guys too much that are doing it wrong. We ought to start rewarding the guys that are doing it right. If anything, I think Iowa ought to give a little

bonus for the kind of soil conservation program it has, and that would be helpful, and I think that would be more encouragement to other States as well.

Senator JEPSEN. I have your answer from nearly 2 years ago. I'll ask you the same question again. Do you think soil conservation should be mandatory or voluntary?

Senator SCHWENGELS. Well, until such time as we can provide either the tax incentives or cost share funds to satisfy the requirements that we have for people that want to do soil conservation work, I'm in no way interested in mandatory controls. We do have some mandatory requirements in terms of people who are eroding their soil onto other people's soil. We have ways of taking care of that, but to make a general mandatory requirement, until we are able to provide the resources, it would be against anything that I believe. I am convinced in my travels over this State that at least 90 percent, perhaps higher, of all of our farmers, they have the method and the means to do the soil conservation work that they know that needs to be done and most of them want to be done, they get it done all right. So when we get down to that last 5 percent, then I might talk about it, but not until then.

Senator JEPSEN. Thank you very much, Senator.

Dr. Donhowe, Dr. Charles E. Donhowe, dean, university extension. Dr. Donhowe, you have graced us with your presence here today. Considering you are retiring tomorrow. I want to thank you on behalf of all Iowans for the work you have done throughout the years, and on this eve of your retirement thank you for joining us.

STATEMENT OF DR. CHARLES E. DONHOWE, DEAN, UNIVERSITY EXTENSION, IOWA STATE UNIVERSITY, AMES, IOWA

Dr. DONHOWE. Thank you, Senator Jepsen. It's my pleasure to be here on this last day as dean and director of the extension service. The conservation and use of natural resources, particularly soil and water, has been a prominent agenda item in both the private and public sector for the past 50 years. Several cooperative and coordinated programs have been implemented under the general objective of natural resource conservation and use. The program classification includes education and research, technical assistance, cost sharing, and incentive investments. All are needed in the continuing efforts to conserve and use soil and water.

Even though these programs have been in operation for 50 years, both individual and societal concerns are present. The concerns may be elevated in intensity today as compared to 25 years ago. Specifically, these concerns are expressed in terms of preservation of prime agricultural land and the protection of fragile lands, the concern of soil erosion beyond generally allowable soil loss limits, the concerns for water quality associated with erosion and the use of chemicals.

Large forces, worldwide and within this Nation, impact upon the natural resource conservation and use goal. I shall not delineate these except to say that the economic forces within the United States, inflation and interest rates, which impact upon the many agricultural producers, create pressures in their shortrun decisions which may

be contrary to longer run goals and policies. A solid, ongoing research base of information is needed as dynamic change within the environment occurs. Soil conservation practices of the past applied to the land today are good business for the private manager and as a public investment.

New practices in tillage systems—chisel plow, minimum-till, and no-till—can be as cost effective as conventional tillage systems with major gains in soil and water conservation. Not all is known in managing successfully these new tillage systems. Research, result demonstrations, on-farm experiences, farmer adaptations to machines, the timing of agricultural practices, and supporting crop treatments, all of these will be positive actions in attacking the soil erosion problem.

Central to the soil and water conservation and use is the ongoing inventory of soil and water resources. This inventory is central for effective planning of land use whether by the farm family or by governmental units concerned with land use at the local, State, and national level. The owners of private holdings must be involved directly in the planning so that the plan is the individual farmer's plan which will be implemented. Peer pressure of friends, neighbors, and whole communities can be a support base important to communitywide participation. Since substantial portions of the land base may be controlled by absentee owners, professional farm managers and others who relate to the renters of farmland can be a positive force in the setting and attaining of conservation and use goals and the accompanying conservation practices.

The argument for cooperative and coordinated implementation of public education, technical assistance, and the incentive programs is persuasive. A strict mandatory approach to soil and water conservation and use practices is not widely supported, although of increasing interest in the society generally. The society may look with favor to some extent on regulations and controls that impact upon others. In Iowa I sense that great support exists for voluntary programs which have education, technical assistance, and incentives to accomplish the conservation goals. As many as a third of Iowa counties are moving into public financial assistance for conservation programs, and I would say that the recipients of Federal, State, and local funds then become very accountable for these funds.

Iowa State University and the extension service have had and continue to have a deep commitment to soil and water conservation and use. There is a direct relationship between extension and the State Soil Conservation Committee. County extension staff members interact with Soil Conservation Service personnel and the soil district commissioners regularly. During the last 12 months, conservation tillage demonstrations have been placed in all extension areas. More than 200 conservation tillage meetings, clinics, exhibits, et cetera have been held with agency and community cooperation, and more activities are planned. The interest level is high. The educational need will continue as it relates to both conservation practices and to policy issues that remain involving local, State, and national government. We do not project either a reduction in that need nor in the extension resources allocated to meeting soil and water conservation and use needs. Thank you for the opportunity to present this statement.

Senator JEPSEN. Thank you, Doctor Donhowe. In your testimony you have indicated, and I quote:

> A strict mandatory approach to soil and water conservation practices is not widely supported although of increasing interest in the society generally.

In response to the question, do you think soil conservation practices should be voluntary or mandatory, could you elaborate on that statement?

Dr. DONHOWE. I believe it should be mandatory. I tried to say in the statement that those who now number more than the owners of farmland look with concern to the problem and are suggesting the kind of mandatory controls that they feel may be necessary in the solution of the problem, but I would repeat that for Iowa, and Iowans generally, I sense that they are not yet ready. In fact, they oppose the idea of a mandatory program.

Senator JEPSEN. Your opinion is, yes, it should be mandatory but at the same time, as reflected here in your statement, you feel Iowans are not ready for it.

Dr. DONHOWE. My own feeling is it should not be mandatory. I was trying to reflect that, I believe, that Iowans generally do not feel it should be mandatory.

Senator JEPSEN. What impact on control or noncontrol of soil erosion do you think absentee ownership has?

Dr. DONHOWE. I'm acquainted with professional farm management concerns who have this as a major concern in their selection of tenants. I think this is a positive force because they make an input to the management of that farm as professional managers, and I see this as a positive force in achievement of the goals.

Senator JEPSEN. Thank you very much, Dr. Donhowe. Your testimony was very helpful.

Harry Scurr, president of the Iowa State Association of Soil Conservation District Commissioners. Thank you for coming, and you may proceed.

STATEMENT OF HARRY SCURR, PRESIDENT, IOWA STATE ASSOCIATION OF SOIL CONSERVATION DISTRICT COMMISSIONERS, GILMAN, IOWA

Mr. SCURR. Senator Jepsen, and members of the Senate Agriculture Committee on Environment, Soil Conservation, and Forestry, I would like to take this opportunity to thank you for inviting me to make a statement for soil and water conservation.

Senator Jepsen, when I spoke with you in Washington last March, my presentation was on the grants to State or district programs which we hoped could be established. Since our discussion on this subject at that time, I have become aware of several problems that I foresee in the grants programs. One of these problems that I foresee is the lack of grant funds for implementation of conservation practices. The grant proposal that I have seen has been for technical assistance. Technical assistance is a very necessary part of any conservation program, but with soil loss at an alltime high, implementation is also badly needed.

Another concern of the grant program is the funding of the program. I had hoped that funds would be additional funds and not taken

from other conservation programs. One of the funding problems at the Federal level is that appropriations, 2 percent of the Federal budget, for soil conservation are discretionary while items such as defense and welfare are not. As a result, soil conservation programs are an easy target for budget cutting, and the clientele served are not in a sufficient number to carry political clout. Clearly the soil and water conservation program in the United States is in defense of our soil and the future well-being of all persons in the United States as well as abroad.

The grants to States may also have the inability to grant—to guarantee the finishing of projects by the withdrawal of funds before the completion date established for the project. I am sure you will recall such an instance in Tama County, Iowa, on the Four Mile Creek research project. If grants to districts or States are to be awarded, they should be for a specified or targeted area with funding sufficient to finish the project. Explaining to farmers in a specified targeted area why a project has been dropped after their neighbors have received assistance and they now cannot does not help soil conservation's image.

We, as a Nation, need to adopt new policies to remove the instability from agriculture. Farmers who cannot make a profit cannot invest in soil conservation. Farmers who are unsure of their future in agriculture are unwilling to make a long-term investment in soil conservation. The young farmer of today cannot financially even consider putting permanent conservation practices to use unless they are already on the ground he is farming. There will be little advantage to a tax credit program to the young farmer. In most cases, there will be little profit, if any. In the case of the young farmer this small profit must be applied to business debt and interest. For the young farmer a low interest loan program would be very beneficial.

Federal loans such as FmHA and other federally secured loans should be large enough to require that at least minimum conservation measures be met. For the older established farmer the income tax incentives program should help to get cooperation from those eligible. Inheritance tax breaks on ground that is adequately protected can be a big asset also. Sometimes the absentee landowners are hard to approach on soil and water conservation, but the above two methods will certainly help get their attention.

During the last 6 weeks, I have had the opportunity to attend two meetings organized by the National Association of Conservation Districts. At one of these meetings I was a panel member on the program and discussed Iowa's cost-share program. We are indeed fortunate to have the cost-share program in Iowa that we have. No other State comes close to the cost-share assistance that Iowans have available to them. Now, we also have nearly 30 counties that are contributing to our local district conservation programs. The possibility of ever getting ahead of our soil and water conservation programs—problems seems to be very slim. It is true that some tillage practices will control some of our soil losses, but on the more severe slopes it will require a combination of tillage and permanent practices.

Of all the programs that are presently in use, both State and Federal, the one limiting factor has been the financial means with which

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to keep our programs operating. A program is needed to generate a constant source of income earmarked for soil and water conservation only. A checkoff on grains has been suggested, but here again the farmer himself will be paying the total bill and the checkoff will be subtracted from the price received from the grain. A small tax on the food dollar could provide funds necessary to increase implementation of conservation practices as well as technical assistance. No more conservation tax should be collected than can be used in a good soil and water conservation program per calendar year. The revenues used from this tax could also be used to provide low-interest loans for the young farmer or low-income individuals who could not afford to do the conservation work otherwise. Upon completion of the necessary measures to protect our food and fiber base this tax should be dropped or reduced to only what is required for maintenance of the conservation programs. This type of program would allow for an increased effort to protect our national resource and yet not be large enough to be a financial burden to any one group of individuals.

In January 1980, the Wallace's Farmer took a nationwide poll. In fact, the Harris poll sampled nearly twice the number of people interviewed in making presidential polls. The results were quite revealing. The pollsters found a strong public concern regarding shortages of food and good land for producing food. A 77-percent majority felt we have not yet reached the point in soil and water conservation efforts where we should be more concerned about holding down cost than completing the work that remains to be done. While attending these NACD meetings this summer, I have noticed a change in perspectives in many States as well as Iowa. Farmland conversions seems to be very much on everybody's mind.

Every hour about 320 acres of U.S. agricultural land are converted to nonfarm uses. Not all of that land is cropland, but about 100 acres is, and another 100, 120 acres have the physical capability to be used for cropland. Losing 220 acres of existing and potential cropland an hour means over 5,000 acres every day, the equivalent of losing 23 average Missouri farms. It means an area the size of the average Missouri county every 2½ months, and the equivalent of the whole State by 2000. It means paving over a 1-mile-wide strip from New York to California every year. The loss can be calculated in economic terms as well. Each day America's potential to produce corn is reduced by some 5,800 tons, worth over $620,000 when corn is $3 a bushel. Each year we lose the capacity to produce about 2 million tons of corn, worth some $220 million at the same market price. And this year's losses must be added to last year's losses and next year's losses and will add to both until the total economic impact from our wasteful land use practices over only a few years adds up to an appalling economic toll. Some type of land use control is needed. If possible, guidelines could come from both the Federal and the State level, but the final decisions and control would rest at the local or county level. Thank you again for allowing me the time to appear before this subcommittee hearing.

Senator JEPSEN. Harry, what would be your answer to mandatory versus voluntary soil conservation practices?

Mr. SCURR. I think until the time we have the financial means to help support the conservation program, I think we need to stay with

voluntary. If we can gain some type of a funding program whereby we can generate some revenue for conservation, then we might think about mandatory.

Senator JEPSEN. What is your thinking about land use control? Were you thinking primarily of soil conservation, or were you thinking of the amount of farmland going out of production each year to some other use?

Mr. SCURR. Land use--land going out of production into some other use.

Senator JEPSEN. You would stay with voluntary until someone, somewhere, required soil conservation practices. Then they also must provide either the majority or all the funds to pay for it.

Mr. SCURR. At least some type of assistance, some type, at least half I would say.

Senator JEPSEN. You are alluding, on page 3 of your remarks, to a small tax on the food dollar might provide the funds. This is interesting. Someone else touched on that here today. Do you feel rather firmly that the soil conservation in this country is everybody's business?

Mr. SCURR. That's right. Like I said in the statement on grain checkoff, I think that will, in turn, be passed on back down to the farmer on the price he receives through his grain. If it was done through the checkoff on the food dollar, I don't think that the dollars expended would be that great per individual. With the few figures that I came up with here in the State of Iowa, $3 per year tax per person would add up to $9 million in additional revenue that could be spent for soil conservation.

Senator JEPSEN. Harry, thank you very much.

I would like to welcome my colleague from Iowa, Senator Grassley, who has just walked in. Welcome, Chuck. How much time can you spend with us?

Senator GRASSLEY. So far I'm on time and I'm all right.

Senator JEPSEN. You are on time.

You are welcome to sit up here if you like until such time as it is your turn to speak. At this time I would like to introduce Ollie Kaldenberg, regional director of the Iowa Soil Conservation Commission.

STATEMENT OF OLLIE KALDENBERG, REGIONAL DIRECTOR, IOWA ASSOCIATION OF SOIL CONSERVATION DISTRICT COMMISSIONERS, ALBIA, IOWA

Mr. KALDENBERG. Thank you, Senator, for taking your time to listen to our problem. My name is Ollie Kaldenberg. I live in Monroe County on a farm 2 miles north of Albia. I have been engaged in farming for the past 40 years and presently operate 1,000 acres with my son. I'm here today as a concerned citizen, a soil conservation district commissioner, and as director for region 9 of the Iowa Association of Soil Conservation Districts.

The last time I addressed this group the topic was soil conservation. Again, I am here about the same thing. I started my speech last time with, I quote, "We have all heard the cry for soil conservation," unquote. Well, that was a year ago, and now it's time to stop crying and start doing. Being a soil commissioner for the last 15 years and help-

ing administer State cost share funds, I have come to realize that not all landowners view soil conservation the same. Some do it, others can't afford it, and some don't care at all.

The last two groups are the ones causing the problems, and we need to get them into sound conservation programs soon. Apparently what we are offering today in the way of incentives is not enough for them to participate. For example, we have Federal and State cost sharing for permanent soil and water conservation practices at the 50-percent rate. We continue to see the same faces year after year apply for the money. This is good because these people are getting the conservation job done, but we are still not reaching many individuals whose farms desperately need soil conservation practices. I use to think that given time we could solve the problem by instilling in the people the ethics of soil stewardship, but let's face it, some people just don't care and never will unless it's financially attractive.

Mandatory soil conservation is an alternative, but I'm not for that until the Russians take over, and even then I'd by lying to save my skin. The financial incentives I'm speaking of have to be attractive enough that landowners can't afford not to participate in a soil conservation porgram. In order to do this, we need to increase our cost share rates, perhaps to 75 percent. We need to continue with ongoing programs such as R.C. & D. and Public Law 566 watershed projects at accelerated rates, and we need to create new tax credits for soil conservation accomplishments. In order to do this, we obviously must generate more money for soil conservation.

I have three proposals which we feel will generate more money. They are by no means the total answer, but in combination with other ideas presented here today, they will have a significant impact. The first proposal is a severance tax that would be placed on exported corn and soybeans to be paid by the foreign buyer. According to 1979 figures, 2.4 billion bushels of corn plus 875 million bushels of soybeans were exported. If we placed a 5-cent tax on corn and a 10-cent tax on soybeans, that would produce $121.6 million for corn and $87.5 million for soybeans totaling $209.1 million. During the same year, Iowa's share of that exported grain amounted to 400 million bushels of corn and 72 million bushels of soybeans. Applying the same tax to Iowa's grain, that would amount to $20 million for corn and $7.2 million for soybeans. That amount of money for Iowa would just about triple our production of conservation work, which is where we need to be to keep pace with current erosion rates.

We, as farmers and the general public, are expected to pay for soil conservation. Why shouldn't the foreign consumer of our grain also be expected to share in the costs? Grains are exported annually, and this would provide a steady flow of money for soil conservation. The second proposal is an investment tax credit. The idea here is to allow farmers a 50-percent-tax writeoff over a 3-year period for investments they've made in permanent soil conservation practices. This means that the farmer could take 50 percent of his cost for soil conservation work and apply it as a tax deduction over a 3-year period. Investment tax credits are allowed for many farm investments. Soil conservation should definitely be included.

The third proposal I guess you would call the Mother Earth contribution. It would be similar to the political fund we have the option

of contributing to each year on our Federal income tax returns. I am proposing that the same option be given to taxpayers for soil conservation each year on the Federal income tax returns. The taxpayer would be allowed to contribute up to $25 to the fund which would be tax deductible. During 1980, for the 1979 taxable year, 93 million Federal income tax returns were filed by taxpayers over the country. The political contribution fund generated $38.8 million, which amounted to 27 percent of the returns filed with a contribution. Applying the 27 percent to the 1.2 million Federal tax returns filed in Iowa the same year, at $25 per return filed, potentially, in Iowa, we could have had $8.1 million for soil conservation. Obviously, that is wishful thinking that everyone would contribute $25, but at least this has potential for raising money, and it gives the general public a chance to voluntarily help improve their environment.

Although my proposals are not in proper form for legislative consideration, the basic idea is there to build on. We would be very thankful for your consideration and possible endorsement of these ideas, and perhaps sometime in the near future they could be presented as bills for legislative action. Soil conservation and time are the important factors here, and we need to be doing something to save both.

Senator JEPSEN. I don't need to ask you the question about voluntary or mandatory. I got that message. You indicated we have Federal and State cost sharing for permanent soil and water conservation, a factor of 50 percent. You indicated that some of the same people were getting some of the funds year in and year out. Would you elaborate on that? You are certainly not saying there is enough to go around. Some people just aren't using it.

Mr. KALDENBERG. Same faces. Well, some people don't care I guess is what I'm trying to say, trying to get more incentive for people that don't care, and people that do care are people who want to get the job done, and this money is what we could use to try to get this job accomplished.

Senator JEPSEN. I understood you to say some people just don't care and never will unless it's financially attractive. That is an area where we really have to communicate—financially attractive. In other words, it's not a one-shot-immediate-return proposition. It involves a long-term effort, and that's where a lot fail, especially with the inflation as has been pointed out.

Mr. KALDENBERG. I think we felt here that everybody knows the needs, but we were trying to think of some ways to dig up some money.

Senator JEPSEN. I was especially interested in your suggestions for three proposals to generate additional money. That Mother Earth contribution is probably not new, but I haven't really thought of it or heard it before. The investment tax credits, Senator Grassley, do you have any comments on that? You have kind of taken a lead on the Finance Committee in the Senate to get some investment tax credit on hog houses, and other agricultural enterprises.

Senator GRASSLEY. I also have legislation in, as you do, on the subject of tax credits for soil conservation work, and it's my feeling that there will be hearings held shortly on the subject, and, hopefully, we can bring to the floor the importance of tax credits for this the same way as there is to stimulate the economy and do it for the preservation of this Nation's greatest resource. At this point it's pretty much

a new idea, that it's going to take a lot of education, not only at the grassroots but within the Congress, to get the proper support, but I think we can do it. The reason I think we can do it is I don't think we are going to be able to have the subsidies traditionally that we have had, at least not expanding enough to accomplish all the good that must be done.

Mr. KALDENBERG. We felt the tax incentive would be something coming out of everybody's pocket, where the exported grain wouldn't. John Q. Public wouldn't be paying for exported severance tax, even though it would be a big contribution.

Senator JEPSEN. Ollie, thank you very much. It was interesting to listen to you. I have no difficulty understanding your message. I like that straight-from-the-shoulder talk. Senator Grassley, we welcome you and thank you for taking time out of your busy schedule to be with us here today. I can't think of any more important role, and I know you feel the same way.

STATEMENT OF HON. CHARLES E. GRASSLEY, A U.S. SENATOR FROM IOWA

Senator GRASSLEY. Well, I appreciate the opportunity to be here. In the process of coming to southeast Iowa I was able to start out at 8 o'clock in the morning in Bloomfield with a public meeting, and then went on to Keosauqua for one, and when I leave here, I'll have a meeting that will last from 3:30 till 5 at Wapello—so I'm able to do a lot of things in the process of coming here, too. But I do appreciate this opportunity to appear before you.

I want to thank you for your leadership in this area. You are chairman of a very important subcommittee, and I know that from your leadership there will be a lot of good that comes out of legislation in the future, and particularly, as I'm going to point out in my statement here, for what leadership you have already exerted just in getting soil conservation provisions included in the farm bill that's before the Senate now.

As you indicated to me in your invitation to testify at today's hearing, you are looking specifically for new ideas on what can be done to accelerate the control of soil erosion in this country. Obviously, this agenda is appropriate for despite the immense amount of private and public funds that have been expended over the years and despite the interest and concern expressed by farmers and the general public—interest and concern that has transformed into considerable action by individuals as well as by local, State, and Federal Government—despite all these efforts, we are still losing our battle with soil erosion.

This point could not be better exemplified than by the situation in our home State of Iowa. The U.S. Department of Agriculture provides over 30 programs of various sorts to facilitate construction and research and technical assistance in soil conservation. Many of these programs are administered by grassroots organizations in Iowa through the soil and water conservation districts. During the fiscal year 1980, over 107,000 land users utilized the assistance of the SCS. Furthermore, over $14 million from State, local, and private consid-

erations were used for conservation work in Iowa during this same period. This effort was exceeded by no other State in the country. Nevertheless, out of Iowa's approximately 26 million acres of cropland only 9 million acres received sufficient conservation treatment. In fact, during the same year, in the month of June alone, 4.3 million acres suffered erosion at levels higher than 10 tons of soil lost per acre. Moreover, Iowa leads the Nation in soil erosion. So obviously something is critically wrong when so much effort and money is directed at the soil erosion problems in our State and yet this soil erosion continues to be the worst in the Nation. It is an understatement to point out that the identification of the soil erosion problem has been far simpler than the development of productive solutions.

Despite these setbacks, I'm optimistic that solutions are available and forthcoming; and although success will depend heavily upon the continued and increased efforts of the private sector and local and State governments, and notwithstanding the financial constraints presently facing the Federal Government, we, in Congress, do have an important role to play in this effort. Success or failure of soil conservation efforts may well hinge upon what Congress does or does not do; therefore, as a long-time advocate of positive soil conservation legislation, I must express considerable pleasure with the leadership that the House and Senate Agriculture Committees have exhibited with the inclusion of significant soil conservation provisions in the 1981 farm bill. These provisions will serve as an important catalyst in our attack on soil erosion. I might add that it is of no coincidence that this precedent of including soil conservation provisions in the farm bill was set following the assumption of the chairmanship of this key subcommittee by you, Senator Jepsen, because you have brought your firsthand knowledge about soil erosion problems into operation. I thought of that the other day, Roger, as I went by your family farm, the fine work that your family has done with soil conservation in that area to the west of the homestead there. It's an ideal example for any farmer to follow.

I'm also pleased with this precedent-setting farm bill from a personal standpoint for it will provide a vehicle for the possible incorporation of portions of legislation that I introduced last year while as a member of the House Agriculture Committee. This legislation, which I reintroduced this year as Senate bill 1560, was based upon the most reliable, up-to-date information available at that time as provided by the preliminary report from the Soil and Water Resources Conservation Act study which is due for completion in December of this year. It was felt last year that this legislation would provide the most effective attack on soil erosion for the least amount of money. Consequently, I intend to study the present farm bill to determine whether any portions of my legislation would serve as appropriate amendments.

Also, during the last 4 or 5 years of my service in Congress, and I might say, since I first introduced a tax credit bill on the subject of soil conservation in 1977, I have worked to develop legislation providing tax credit for soil conservation. The need for tax credit legislation could not be more stronger than it is today. It is clear that our present subsidy programs geared to stop soil erosion have been inade-

quate. Some of this problem has been because there has not been enough money to fully support these programs, and in light of the latter consideration, the future can only look worse. With the Federal Government's severe budget constraints, we cannot realistically expect sufficient funding for many of these programs. Therefore, the tax credit approach has truly come into its own.

Consequently, I have reintroduced the tax credit legislation that I have worked on in the past as S. 1561. Since this type of legislation falls within the jurisdiction of the Senate Finance Committee, and I'm a member of that committee, I'm looking forward to utilizing this new position to champion this legislation through Congress. Mr. Chairman, I'm also quite pleased to see that you have taken a lead with your own soil conservation tax incentive legislation, and I look forward to working closely with you on legislation during the coming months of this Congress.

There are other significant actions, however, that Congress can take, in addition to establishing new programs, revising present programs, providing tax incentives, and all those different things to expedite the control of soil erosion. I believe that Congress can offer considerable assistance in this effort by exhibiting solid leadership. This can be accomplished by directing attention to conservation practices that are immediately available to farmers, practices of which many farmers may be familiar but which are new enough as to cause hesitation by farmers to utilize these practices. In particular, I am referring to the farm practices of conservation tillage.

Conservation tillage has been around for some time now. In fact, in relative terms, its use has increased dramatically over the years. In 1980 about 60 million acres were under conservation tillage as compared to about 4 million acres in 1960. I should add that all 200 acres of my own farm is under conservation tillage, and I am quite pleased with its effectiveness in controlling erosion. But let me say in the case of some of my land, it's not a final solution to it, but at least it's a cost effective one that we can start with.

As the benefits of this approach become more widely understood and recognized, we can expect the adoption of conservation tillage to increase substantially. Moreover, scientists and researchers predict that by the year 2000 almost 50 percent of U.S. cropland harvested will be under conservation tillage. The question that must be addressed, therefore, is whether it's necessary or perhaps even wise to allow such a long period to pass before these practices are adopted.

During recent months more and more people have contacted me to point out the benefits of conservation tillage and have urged me to take steps to help enhance the utilization of this practice. This growing interest prompted me to request the Congressional Research Service of the Library of Congress to prepare a comprehensive report on conservation tillage. This report, completed in June of this year, analyzes the costs and benefits of using conservation tillage as opposed to conventional farming methods.

As a result of this report, which I will be happy to share with you and your committee, and upon the basis of additional recent information, I believe that this is a practice that many, if not most, farmers could utilize to effectively combat soil erosion while at the same time

maintain, if not improve, farming profits. Granted, some farmers cannot utilize conservation tillage, and others will need to apply additional forms of conservation work; however, because soil erosion has become such a serious problem, it is in the interests of all farmers to at least research the possibility as to whether or not conservation tillage will work for them.

It is clear that major gains could be made in our own home State. Recently it was reported that almost every acre of row and small-grain crops in Iowa could utilize conservation tillage. In light of the fact that Iowa leads the Nation in soil erosion, I do not think farmers in our State can afford not to look into conservation tillage, and this goes for farmers across the country. Consequently, during the upcoming consideration of the 1981 farm bill, I intend to introduce this CRS report into the Congressional Record for the informational benefit of our country's farmers. Furthermore, I intend to offer a resolution urging farmers to carefully and seriously consider utilizing conservation tillage, not only for their benefit but also for the benefit of our environment. I strongly believe that the adoption of this kind of resolution by Congress can provide the leadership and direction that farmers are looking for in their fight against soil erosion. I hope that you and other members of the Senate committee can join me in this effort, and, Roger, I specifically ask you for your help on that after you study it if you figure it's worthy of our consideration.

Once again, thank you for the opportunity to appear before you, and, once again, I not only want to commend you for this hearing and this leadership, but also I want to emphasize a second time that I don't think there would have been any soil conservation provisions in the 1981 farm bill if you hadn't been chairman of the subcommittee. At least when I worked on the 1977 farm bill as a member of the House Agriculture Committee, there was not that amount of consideration given to it.

Senator JEPSEN. Thank you, Senator. Thanks to every one of the witnesses to date, we are on time. Senator, if you would entertain questions, we do have 5 minutes scheduled for that purpose. If there's anyone that wants to direct a question to Senator Grassley relating to soil conservation or the tax incentives, I am sure he would take a minute or two to answer it. This is one of the "hired men" you sent back to serve you in Washington, and I just want to make the opportunity available if somebody wants to ask a question.

VOICE. I was wondering, Senator, if there has been any thought in this tax preparation that you have been working on and also the changes in the estate tax setup which has taken place of using some of the agriculture estate tax money and earmark it for the purpose of soil conservation. Most of this, I should say all of it, estate tax money that comes from agriculture land, has been generated from this land, shall we say, and maybe here's a possibility of picking up some dollars for permanent-type soil conservation practices, and I would say that this money must be earmarked so it would be there from year to year.

Senator GRASSLEY. I'm sorry to answer your question by saying no, at least not to my knowledge, or any of the discussion that has been carried on in the Senate Finance Committee, has there been any discussion of that. Probably part of it relates to a general reluctance

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to earmark specific funds, although we do do that with some special taxes, and it may be something that we ought to give some thought to in the way of hearings, but that's all I can say for now.

I suppose I should say additionally, though, by the time we get the exemptions for the estate tax that have already been legislated, worked in the next 5 years, estate taxes will be down so that no estate over $600,000 pays estate taxes, and in the instances where there is a surviving spouse, there won't be any tax paid on that estate. Hence, you know there is less coming in from agriculture than even under existing law, so there is that point that needs to be made about the deemphasis of it; whereas today about 8 percent of the estates are paying taxes and about 25 percent of the small farms and small businesses are sold to settle estate taxes. The farms that are in estate are sold, but that should be down to just three-tenths of 1 percent of any estate paying tax in 1987; and, no, I would think at that point, unless we have terrifically escalating land values that it would be necessary to sell any farm or small business to pay estate taxes.

STATEMENT OF LEO TALBOTT, MOUNT UNION, IOWA

Mr. TALBOTT. Senators Jepsen and Grassley, I'm Leo Talbott from Mount Union, Iowa. I am a farmer, and I plead with you right now don't put another tax on. I sit here and listened this afternoon to a gentleman say let's put a tax on grain at the other end. Please don't put another tax on our grain because you know who pays that tax. I, as a farmer, pay that tax. Here are my neighbors and my friends sitting here. They are going to pay that tax. So I ask you don't put a tax on the other end of our grain for the simple reason you know and I know that down at Alton, the lock and dam, you added a 4-cent tax onto diesel fuel. I went to the barge terminal and asked them about it and that took 4 cents a bushel off our grain, so that goes right back to us as farmers. So if you are going to put a tax on soil conservation of any kind, don't add it to the price of grain anywhere, if you possibly can, because at the present time you and I both know we are just about to survive and that's about it, and at my age I'm surviving, but I have sons, and they are not going to survive this farming business, so our land is going into larger hands all the time.

I think both of you gentlemen know that from looking at the statistics, so where are we going to go from there. I think that's one of the problems with soil conservation right now. I rent some land, and I'll be real honest with you, the people I rent from will not let me do any soil conservation work. I bought a $10,000 piece of equipment to do soil conservation work, and I can't use it on our land because their father wouldn't do it years ago, and I think that's our problem. It's understanding the problem that our land is going away from us, but seems like some people just simply don't care. But don't add another tax to the farmer. That's what I'm saying to you two gentlemen this afternoon.

Senator JEPSEN. Mr. Talbott, thank you very much for your comments. We are on schedule. Senator Grassley, thank you very much. Are you going to stay?

Senator GRASSLEY. Just about 20 minutes.

Senator JEPSEN. You are going to remain with us for a while. Good.

Wayne D. Towers, chairman, Iowa Land Improvement Contractors of America. Welcome, Wayne. If my memory serves me correctly, I believe you were here before us 2 years ago. Good to see you again.

STATEMENT OF WAYNE D. TOWERS, BOARD CHAIRMAN, IOWA LAND IMPROVEMENT CONTRACTORS ASSOCIATION, URBANDALE, IOWA

Mr. TOWERS. Mr. Chairman, my name is Wayne Towers. I am past president of the Iowa chapter of the Land Improvement Contractors Association. I am presently the chairman of the board of the Iowa chapter and newly appointed national chairman of the conservation operations committee.

Mr. Jepsen, as a representative of LICA, we greatly appreciate this opportunity to present some of our views on the country's soil and water conservation needs. We, in the Iowa chapter, are happy to have you as our Senator, and the national association of LICA is very appreciative of your efforts in the conservation of our soil and water. The fact has been well established that the rate of topsoil erosion from America's farmland far exceeds the rate we can allow and still maintain productivity.

However, I do want to make a brief statement as to the topsoil erosion from the farmlands of Iowa. The annual rate of soil loss from Iowa farmland is 261 million tons. Wondering whether our farmers and the public really understand what 261 million tons of topsoil is, I decided to divide it into trainloads, and this is what I found. If you could place a train on Iowa's southern border the entire width of the State, an average of 280 miles, and then place one every 1¼ miles from our southern border to our northern border, which would be 189 trains from east to west, and filleach boxcar with its recommended capacity, which is 50 to 55 tons, it would just hold the topsoil lost from Iowa annually, 1 year. According to the statistics of the Iowa Department of Soil Conservation, the nutritional value of a ton of Iowa topsoil is $5. Please do not interpret this as productive value. At the rate of $5 a ton, Iowa's nutritional loss, not to mention productive loss, is $1,305 million annually.

How can we solve the problem? Land Improvement Contractors believe we must have additional funding for conservation and have come up with a way to get additional funds without the need for additional appropriations. As envisioned, these extra funds would come from private sources as tax-free contributions into a national endowment by individuals, corporations, and foundations with a direct stake in agriculture and the quality of rural life. This might include producers of agricultural chemicals like fertilizers, pesticides, herbicides, oil companies, manufacturers of agricultural machinery like tractors and cultivators, and dealers and shippers in agricultural commodities. What would it take to make this miracle come true? We think the answer is publicity and tax incentives for donors, brought together in a vehicle called a National Endowment for Soil and Water Conservation. There is now legislation which would provide the necessary vehicle, H.R. 2455. We sincerely urge you to lend your support to this bill.

Land Improvement Contractors are concerned about the agricultural conservation program and watershed and flood prevention programs which have been slated for major cuts by the President. We would ask that Federal funding for conservation at least be kept at current levels. And at the time of putting this note together I didn't know that our conservation funding had been held and even increased $10 million, which we appreciate.

Additional funding for the agricultural conservation program could be realized by transferring a percentage of EPA point source pollution funds to nonpoint source projects. This means to soil and water conservation, basically. The soil that enters our waterways is the single largest source of water pollution. The Government spends billions of dollars in cleaning up the effects of this erosion downstream. It would make more sense, both management and costwise, to stop the pollution where it starts, on the land.

A recent national survey of the Land Improvement Contractors indicates that our members feel a loan program offering low interest loans to farmers for conservation work and a tax credit for farmers who cannot get cost share payments through the ACP program because of depleted funds. The survey indicates also that 100 percent tax credit is considered even better than the conservation loan program or the current ACP program. We feel this idea merits some serious consideration in Congress.

What about minimum-till and no-till farming as a method of conserving our soils? Iowa Land Improvement Contractors supports both as a temporary means of slowing erosion. We feel it accelerates the runoff of pesticides and herbicides and, therefore, adds more pollution to our waters. We do not believe ACP cost share should be given for nonpermanent methods of slowing erosion, such as no-tillage farming.

I would like to bring to your attention a potential problem concerning the ACP payment limitation. Due to inflation, we feel the $3,500 individual annual payment limitation should be raised to $5,000. This would substantially increase the amount of conservation put on the land.

I would like to point out that the very short conservation construction season is a great problem which hinders our progress in bringing soil erosion to tolerable limits. Spring construction season, at best, is 60 days, or less, depending on the weather. Spring construction also cuts crop production and the cost of construction is higher because the soil doesn't work as well as it does in midsummer or fall. The fall construction season is usually about 60 days. That is a total of 120 construction days annually for conservation. If there could be some incentive for farmers to let the ground lay idle that is scheduled for construction, and the incentive being payment for the acres to be idled, or possibly a greater cost share, we could lengthen the construction season to 240 days.

The cost of terraces built in midsummer usually is 10 to 20 percent less because of working conditions, and the savings might well cover the incentive costs. What it boils down to, in summary, is money. I read in a Reader's Digest a short time ago, and I thought it was quite true, it said "They used to say money talks, but today's dollar doesn't

have enough cents to say a great deal," and that's a fact. That's why we are short. If we can get the money and the longer construction period, we can do the job. Thank you.

Senator JEPSEN. Do either of you have any questions? Senator? Rex?

Mr. TRACY. I might ask Mr. Towers to expand a little bit about his feelings on the efforts of no-till in combination with some more permanent practices. Do you feel that it might have a place in combination with some of the more permanent soil and water conservation practices?

Mr. TOWERS. We do, yes. We strongly recommend, even after terraces, that a minimum-till should be used. No-till farming, of course, takes more herbicides. If you are going to keep the weeds down, you are going to have more herbicides. It is going to stop erosion, but what's it's going to do to our water? That's our thinking, because that water runs off. Even though through terrace systems and tile systems, it still enters our streams.

Mr. TRACY. Do you have some concern about the permanency of the no-till conservation practices?

Mr. TOWERS. I do, yes. I even have some concerns about the permanency of terraces. Tenants, some don't like them, you know. However, a good terrace system, if well maintained, will last at least 20 years.

Mr. TRACY. But they have to be maintained, right?

Mr. TOWERS. Right, and the program says they have to maintain it or pay the money back. No-till, they can plow it up the next day if they like.

Senator JEPSEN. This brings to mind a personal experience. Senator Grassley mentioned our terraces at our homeplace. Those are the second set. The first ones washed out, and this idea that you offered possibly would provide some incentive for landowners that were definitely going to apply soil conservation practices such as terraces. Some incentive should be provided. It could lay idle, so work could be completed, with the proper timing. That may have some merit. I think in our particular case we pushed to get it completed, as I recall, and then we happened to have an extra heavy rain, and the water was held from the top until the new terraces, gave away. We had to start all over again. So for more than one reason, that suggestion is very noteworthy. Thank you very much.

Mr. TOWERS. If I could answer one question, you haven't asked; about whether or not I believe we should have a voluntary or mandatory conservation program.

Senator JEPSEN. Yes.

Mr. TOWERS. I was in hopes you would ask that, but since you haven't, I'm going to answer it anyway.

Senator JEPSEN. Thank you. I would have asked sooner or later. Please proceed.

Mr. TOWERS. I'm going to use our own county, I live in Polk County, as an example. We have in our office over a million dollars worth of signatures—applications for conservation work, not being able to near meet that, and I think all of the counties probably are spending for conservation work all that's been allotted to them. Until such time as

we can furnish the funds, I would see—I would think that would just be agitating the farmer to ask or to even suggest that it be mandatory when they are trying and can't get it done. Now, Iowa Land Improvement Contractors is putting on programs all the time. We are training people. We would even go into it more intensive if the money is there to do the work training our people to help with the layout work, help with the checkout work in any way that we can help get the conservation on the land, so for that reason I would hope that it would not be made mandatory until such time as we see that the farmers are not trying to do so. I would also like to add that we have our State convention, Des Moines Veterans Auditorium, January 18 and 19. We would like to invite you to attend our convention one of those days. We would visit with you afterward, if that could be made possible.

Senator JEPSEN. Thank you, Wayne, and I do want the record to show I'm not questioning your authenticity or quarreling with it, but I know there are some sources that would agree with me, when you state that the runoff of pesticides and hericides on no-till is greater than on conventionally tilled fields. I have asked that question a number of times myself, because they do require heavier applications. One may see in this picture—when we take a break soon, everyone can observe no-till land where there is little or no runoff, then there is some question that pesticide-herbicide runoff is increased.

Mr. TOWERS. I understand what you are saying, and, of course, in Polk County the parts that I'm referring to is quite hilly land, which makes lots of difference.

Senator JEPSEN. Yes. The angle and the slope have a direct bearing. You may observe this picture during the break. I'll lay it on the table. It was presented to me today by the soil district commissioners of the State of Iowa. It's taken in 1980 on the Jerry Hill farm in Decatur County. Hill and his son are inspecting a field of no-till corn after a heavy rain which caused soil losses recorded at over 200 tons per acre on neighboring farms. This field was right adjacent to those fields and incorporated the no-till method, and it sustained very little soil loss, as you can see in close examination.

Mr. TOWERS. The only part we feel is that it's temporary and that it's money spent—well, for instance, you say you use 10 percent of your funds for no-till. Well, in 10 years you have spent 1 year's allocation and you still don't have any permanent practices. That's our thinking, and you are still back where you started from. Thank you.

Senator JEPSEN. I thank you very much. We will now take a 5-minute break, and we will start again promptly in 5 minutes.

[Whereupon, at 2:42 p.m., a short recess was taken.]

AFTER RECESS

Senator JEPSEN. We will now hear from Mr. Merle Doughty, who is president of the Missouri Association of Soil and Water Conservation District Commissioners, our good neighbor from the south. Welcome to the State of Iowa and this soil conservation hearing. Thank you for taking the time to come and share with us. You may now proceed.

STATEMENT OF MERLE DOUGHTY, PRESIDENT, MISSOURI ASSOCIATION OF SOIL AND WATER CONSERVATION DISTRICT COMMISSIONERS, JAMESPORT, MO.

Mr. DOUGHTY. Thank you, Senator. I appreciate the opportunity to appear before this committee on soil conservation. I would like to first of all express my appreciation to you, Senator Jepsen, for your dedication to soil conservation and the amount of time and effort you contribute to it. Like our sister State to the north, we, in Missouri, also have some real soil conservation problems. In a little over 100 years we have cultivated this land, we too have lost one-half of our topsoil. With the soybean culture we have going now, it looks like we will lose the rest in about 60 years. We are losing an average of 11 tons per crop acre per year, and this varies from none to over 60 tons per acre per year. At the University of Missouri tests show that we have a 47-ton-per-acre loss on continuous soybeans on a 6-percent slope of conventional tillage, and we have a lot of land in north Missouri, and continuous soybeans with a 6 percent or greater slope.

Senator JEPSEN. Forty-seven tons per year?

Mr. DOUGHTY. Forty-seven tons per year on continuous soybeans on a 6-percent slope with conventional tillage; yes, sir. That's 1 inch of topsoil every 3 years on 150 tons per acre per inch. The loss of our topsoil is indefensible. There is no way we can justify the loss of our most important natural resource. Never has a nation been blessed with the good fertile topsoil and weather combination that we have for food and fiber production. To let it erode away, as we have, is almost unbelieveable. Now, it really doesn't have to be this way. We have the knowledge, the technology, the machines, the materials, and if we put our priorities in the right place, we have the money to stop this terrible waste. There is nothing more important to our physical or economic well-being or our national defense than the preservation of our topsoil.

I would like to suggest some possible solutions to our dilemma. Of all the soil conservation programs, the most successful, in terms of getting conservation on the land, is the Great Plains program. They have practices on over 60 percent of the land that needs it, compared with our less than 20 percent in Missouri. With a 2-year waiting period for project starts, they feel they could have accomplished much more had the cost share funds been available in the 25 years that they had the Great Plains program to work with. We know in Missouri that a strong education program on no-tillage and conservation tillage will get more conservation on the land at less cost than anything we can do but find it next to impossible to get Federal, State, or local moneys for such projects.

Special earmarked taxes for conservation is a possible solution, such as Senator Jepsen's conservation tax credit bill No. 569. This is an excellent bill which Missouri strongly supports and we feel will get a lot of conservation on the land. A severance or export tax on corn, soybeans, wheat, and cotton is a possibility, a tax on commodity trading on the board of trade, or the royalties on offshore oil collected by the Department of Interior. We also feel in Missouri that somehow

conservation farming should be more profitable than soil depleting farming through tax relief or adjustments of some kind.

To sum it all up, we feel in Missouri that we can get the conservation practices on the land with a voluntary program, but it will take a strong cost share program like the 80 percent cost share in the Great Plains program to get the job done. If this isn't forthcoming, then we feel we must go with a mandatory program to stop this terrible waste of our most precious natural resource. In Missouri we are running out of time. We can't put this off on another generation. It's up to us. Let's not let future generations down by failing to do what is ours to do. Thank you.

Senator JEPSEN. Thank you very much, Merle. I have noted that in comments over a period of time, now going on 3 years, at the various hearings, both in Washington and out in the field, people who will suggest that mandatory soil conservation be instituted are the ones who have witnessed or are in a geographical area where the soil conservation is most severe. I notice your rather explicit statement that if something doesn't happen, like the Great Plains 80 percent cost share program, then you must go to mandatory effort, and you are familiar with areas, as you indicated earlier. I want to make sure I heard right, 47 tons per year per acre on continuous soybeans? That's devastating.

Mr. DOUGHTY. Yes. Because of the climate that we have there, the dry periods that we have, we have an awful lot of dry summers in Missouri, and over the years soybeans have proven to be a better profit crop than corn, and, of course, more erosive, and the farmers have gone to continuous soybean. We grow something like five times as many soybeans in Missouri now as we grow corn, and there' a lot of continuous soybeans, just year after year after year of soybeans, even on these hills, and if we are going to have anything left to farm, why we sure need to get to work on it, and we are not getting the job done, not even close to it.

Senator JEPSEN. Were those hills always under tillage?

Mr. DOUGHTY. Oh, no.

Senator JEPSEN. Were they plowed? Did they have cow-calf herds on them, dairy, or what?

Mr. DOUGHTY. Cattle were pastured on them, and, of course, the cattle business became unprofitable, and a young fella comes in and buys the land, he doesn't have the money to put cattle on that land, if he can even make a downpayment on it, and in order to—of course, he still can't pay for it even by plowing it up and putting in soybeans, but he can come closer to it than by leaving—than buying cattle, borrowing the money, especially at this high interest rate, and putting cattle on it, so everyday in north Missouri someone plows up another hill and puts it in soybeans.

Senator JEPSEN. Everyday in southern Iowa that happens too.

Mr. DOUGHTY. Yes, that's very true.

Senator JEPSEN. Familiar story. Mr. Tracy, do you have any questions?

Mr. TRACY. Merle, you have a so-called target area in north-central Missouri, I believe it's nine counties, if I remember correctly.

Mr. DOUGHTY. I live right in the middle of it.

Mr. TRACY. How do you feel about this concept of addressing the soil and water conservation problems?

Mr. DOUGHTY. Well, we will take the soil conservation moneys anyplace we can get it. We are desperate. We need it. I think it's great, but we need it all over north Missouri. We need it not only in the 9-county area but in the whole 114 counties in Missouri, we need that, you know, and we are very grateful, and we even lobbied a little bit for this in order to get this in. In fact, we lobbied a lot for it, but we need it all over Missouri, you know, especially in north Missouri where most of the agriculture takes place. South Missouri, of course, their topsoil is gone, and they didn't have much to begin with, and there's not as extensive farming in that area.

In north Missouri we originally had, like Iowa, 14 to 16 inches of topsoil, and we are down in lots of places to nothing, of course, farming the subsoil. Of course, we can farm the subsoil and get about half the production out of it, cropwise. According to university tests, I think on a 19-year test, they had the corn—continuous corn and brought up tests on fertilizers, you know, on a badly eroded soil and then right beside it some moderately eroded soil, and the moderately eroded soil yielded over 19 years 92 bushels and on the seriously eroded soil the average yield was 48 bushels or 46 bushels, somewhere in that vicinity, just about twice.

Of course, we can't farm this subsoil when we get down to bedrock, and we are getting there in places too. It's really serious, and we have to do something, and I'm not imposing mandatory. I think we can get the job done with voluntary control. I mean on a voluntary basis without controls, if the money is available, but I think it's going to take, like I said, a strong cost share program, in the vicinity of 80 percent, 75, 80 percent, in order to get it done, and I think we can get it on 80 percent of the land with that, and then I think if we get it on 80 percent of the land, I think peer pressure will put it on the rest, you know what I mean, and I would like to get it done within the next 10 years. Thank you.

Senator JEPSEN. I understand. You talk very plain too. You bring your own sound effects with you. [Thunder and lightning outside.] Thank you very much.

Roger Rowe, Illinois, neighbor to the east, president of the Illinois Association of Soil and Water Conservation Districts. Roger, you have a very good first name. You may proceed.

STATEMENT OF ROGER R. ROWE, PRESIDENT, ILLINOIS ASSOCIATION OF SOIL AND WATER CONSERVATION DISTRICTS, MARSEILLES, ILL.

Mr. ROWE. Yes. I appreciate the chance to come over here to Iowa. I also appreciate the chance to be so close to the Illinois line. When you chase me out of here tonight, it won't take me very long to get back home. I am Roger Rowe, president of the Illinois Association of Soil and Water Conservation Districts. I have been engaged in farming since 1962. I farm 775 acres in corn and soybeans and an additional 1,400 acres with my father and two brothers. I am also chairman of the LaSalle County Soil and Water Conservation District Board. I

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have given Rex two papers there to be entered into the record so that you will have some background as to how I arrived at some of these thoughts and where we are coming from in Illinois. They will be part of the record, and I don't think you have them in front of you.[1]

Senator JEPSEN. Let the record so show and I'm instructing the reporter to enter these into the record, now you may proceed.

Mr. ROWE. Thank you. I'm here to give my thoughts on new concepts and redirection to the problems of sediment and erosion. I'll try to get right to the point. I'm against a food tax, and export tax, and a selective severance tax. I'm against a tax law that does not require the moneys collected to be spent in total each year. I am for grants to districts with a 10-year contract if there is new moneys available. I am for a national symbol and/or representative to promote conservation nationwide. I am for more tax breaks for conservation. I am for a professional educator to reach all ages working through district offices. I am for a checkoff on all commodity futures transactions to be collected for a fee by a broker and forwarded to the USDA, earmarked for SCS technical assistance, and for district grants to be spent in total every year.

Following are some of the problems that I see and have seen in the past and the present, and if they continue, there will never be enough cost share and there will never be enough technical assistance. No. 1, just because an individual takes cost share doesn't make him a conservation farmer. Also given technical help, a farmer may not believe he has a problem. If we ran a business these last 40 years like we have run conservation, we would have been bankrupt 20 years ago, and that's a fact. I believe that. The days of adopting conservation practices because of motherhood and apple pie are coming to an end.

We farmers can't ask lenders to help us with loans based on pure emotion. We need to justify conservation in business terms. We, as conservation leaders, cannot continue to ask farmers to practice conservation based on emotions. If a farmer goes to the market to buy a load of hogs, he takes his calculator and figures the price of hogs, the inputs, and what he can sell them for to make a profit. The same with cattle, chemicals, fertilizers, and seeds when we plant our crops. But not when it comes to soil conservation. We need to approach soil loss in a businesslike way. We need to have established the cost of a ton of topsoil, so that we can use a calculator and figure that if we were to no-till a piece of ground that was losing 20 tons to the acre, the soil loss would be reduced to 3 tons, resulting in a savings of $85 per acre per year.

In Illinois we estimate $5 per ton, and that's just nutrients. By taking good soil tests, that include organic matter every 3 years, we can measure the progress.

We need to be better businessmen as conservationists. We need to encourage people who own land to invest in conservation. We believe a 10 percent or greater investment credit as an option to tax straight writeoff is part of the plan. We believe, by putting terraces, waterways, and other conservation measures in the same category as machinery, we will give the landowner the option of investing in land conservation, rather than trading a pickup or tractor for tax pur-

[1] See pp. 63–66 for the papers referred to by Mr. Rowe.

poses. After all, a terrace and a waterway are implements of farming. Give the option of a 10 percent or greater investment credit. Use good business principles to sell conservation, not cost share. Put a price on a ton of soil. Give technical people sound business training.

Above all, sell conservation. Promote conservation just as any business would promote their product, and don't be afraid to spend money for advertising the benefits. Remember, when you pay a person to conserve soil, you have no guarantee he will continue, but if he is sold on conservation, he will be more likely to continue. I would rather see a person sold on conservation than bought. While all of the above is done, we must remember that right now we cannot fill the needs for technical help. It will be worse in the future. We propose an accredited short course in the junior college systems across the States that will be uniform for each State. It will allow individuals who have interest in farming to be certified by SCS and bonded to do their own conservation work, using the technical guides provided by SCS. The district conservationist will only have to spot check the work. This makes his time more useful. This will also allow people to finish the job without waiting for someone to check it and make time for everyone more productive. A certificate will be placed on file with the district office, certifying the job. This would provide an audit check.

Now then, we have to realize that there are people who have land and who all the tax breaks in the world cannot help. They need cost share help, and they should have it. How do we arrive at some form of funding for conservation? We have said that all of society should pay. Well, I'm against a food tax. There are people who cannot afford food in Illinois and we're proceeding to take the tax off the food, let alone a tax, and we end up helping them, so we are just paying our own bill anyway. I'm against an export tax. I believe it's too selective and will feed back down to the farmer, and it's penalizing the one thing we have got going for us, that is, exporting our crops to get a better price for it. I am against a severance tax on certain crops. The cost needs to come off of all crops and farm commodities.

I am for a tax that is Federal and must be spent every year assisting soil and water conservation district programs. The key words are "must be spent every year". If there is no new money provided for conservation, I believe grants to districts would only weaken the conservation effort nationwide because it would take funding away from technical support, or any other support for that matter.

Grants are soft money and have a history of being taken away or reduced, causing local governments to fund a federally started program. The locals have caught onto this and do not want to see hard projects started with soft money. If there is new money, I'm for grants, if the Federal Government will contract a base amount for a period of at least 10 years. Then soil and water conservation districts can locally administer these funds through district programs.

I am for a checkoff on the Federal IRS form of $5 or more to be taken out of your refund to be used for conservation. I am for a law that stops local assessors from raising your property taxes when you do conservation work. I am for a tax on all commodity future trades to be collected by the broker for a fee and to be turned over to the USDA to be spent on soil and water conservation through technical

assistance and for district programs. This tax would allow all crops and ag-related products to support conservation. Also, it would allow all of society that benefits from our Nation's resources to contribute both in private sectors and overseas. I do not believe it would feed back to the farmers if placed on trades and not bushels.

I'm against any funding for districts that just provides a few dollars. We need a concentrated effort on conservation, one that uses as a centerpiece a local soil and water district which is responsible for this country's natural resources. They need to have on staff a qualified technical person, a qualified educator, a qualified economist/businessman, and they must all be able to sell conservation. They must be responsible to the local board.

Now, to summarize quickly, stress economics through soil testing and put a dollar figure on a ton of soil. Promote and sell conservation through the mass media. Adopt a conservation symbol or representative and have a private advertising or marketing agency put together a package just as they would any product they would sell, then spend money on it. Don't be afraid to use it. Provide tax breaks and incentives for conservation practices, and provide increased tax breaks for conservation implements, example, a no-till planter would have a bonus investment credit higher than a plow.

No. 2, we need to use the junior college and community college systems across the States to provide accredited courses to people with the incentive being qualifications for tax breaks and cost share. And this will provide more technical people to get conservation on the land without Government hiring them. And, lastly, staff each office with specialists in the technical field, the education field, and in business economics. We thank you, and we think that these new ideas have possibilities. We don't say they are all the answers, but we were asked to come up with new ones, and we hope they will be helpful to you, Senator.

Senator JEPSEN. Thank you, Roger. That was jam-packed full of ideas and recommendations and questions. How do you feel about voluntary versus mandatory?

Mr. ROWE. The State of Illinois and the association is on record as being opposed to mandatory conservation.

Senator JEPSEN. How do you personally feel about it?

Mr. ROWE. I am opposed to it and will stay opposed to it.

Senator JEPSEN. Is absentee landownership a problem in getting conservation work done?

Mr. ROWE. It's a problem, yes. There are people who are not close to the land, that individual tenants would like to do some conservation work, who do not understand what they are talking about. Those people, I believe, need to be reached with some type of a program to promote, sell, and educate them.

Mr. TRACY. Just to expand on that, Mr. Rowe, is there something that can be done with the income tax code to give these absentee landowners some incentive to do conservation work? Is that a barrier?

Mr. ROWE. I think it would help greatly. I think this investment credit that's proposed, I believe, as I understand it, they can take advantage of this when they do conservation work on their farm, the 10 percent or greater. I think that's going to be a great benefit to those

people. Hopefully, it will be greater than 10 percent, and, hopefully we will be able to take advantage of all the changes in the tax laws, which we have just signed, and that will help too.

Senator JEPSEN. I have to admit this is the first time I've seen a recommendation for a professional educator to be employed in the district offices. I want to be clear about terminology. You mean someone who can communicate, explain soil conservation, will set up public relations programs; is that what you had in mind?

Mr. ROWE. No. Let me give you a quick example of our office back home. Back home I have a secretary, who is a teacher by trade. She works for our board, but she's a teacher, and we put her in every school in the county. Whenever we send her out to teachers' institutes, they all want what we have to offer. They all want their kids to know about it, any age, be it kindergarten up to junior high, or whatever, high school, but none of them feel they have the qualifications. Our gal does. So we send her out into schools, and she will put on an 8-hour course for these kids. That's the type of an educator. Our aid is a businessman, we hired him out of a business, and we hired him for his qualifications as a better businessman, and he promotes and sells conservation with business principles; and, of course, we have our technicians.

Senator JEPSEN. Excellent idea. We were in southwest Iowa a week and a half ago or so talking about soil conservation. There is one area where they actually involve the students in the school system on a project that had to do with Canadian geese in an area. While that was going on, they talked about soil conservation, they see it, and I think that, you know, as the twig is bent so is the tree inclined. We are talking about long-range propositions in soil conservation. I think by not getting our young people involved early in school, that we have really missed the boat. I appreciate your testimony here and your elaborating further on your recommendation. Excellent ideas.

Mr. ROWE. Thank you. The one thing that really is behind that in my mind is this: In one more generation hardly anybody in the United States will have roots from anything but concrete and blacktop, and that scares me. We all have roots in soil yet, but not one more generation. Thank you.

Senator JEPSEN. Thank you, Roger.

Daniel Stadtmueller, Monticello, Iowa. Daniel is a longtime personal friend. Dan was featured in a story this morning in the Des Moines Register with regard to farming. I read it on the way down, Dan. They talked about you looking at a farm pictured by a strip of beans, and then a strip of corn, and another stirp of beans. That was unique and different. The whole story is about this. What do you do with it?

STATEMENT OF DANIEL STADTMUELLER, IOWA FARM BUREAU, MONTICELLO, IOWA

Mr. STADTMUELLER. It's just some of my innovations that seem to be working quite well. I'm going to testify today on behalf of the Iowa Farm Bureau and give their testimony first and then conclude with some of my operation. My name is Daniel Stadtmueller from Monticello, Iowa. My wife, Diana, and I farm over 1,100 acres of row

crop corn and soybeans using a modified no-till method in Jones County, Iowa.

I am testifying today on behalf of the Iowa Farm Bureau Federation. I'm a member of the house of delegates and serve on the field crops advisory committee for the Iowa Farm Bureau Federation. I am also currently vice president of the Iowa Corn Growers Association and a director on the National Corn Growers Association Board.

I wish to commend this committee and its chairman for your aggressive activity in seeking both short-term and long-term solutions to the very serious soil erosion problem. This problem of soil erosion has been mulled so often that it hardly needs reemphasizing. I am concerned that Iowa and other Corn Belt States experience the highest sheet and rill erosion in the country; that Iowa's losses of soil average 10 tons an acre, twice the accepted loss; and that half of our topsoil may have been lost in the last 100 years of farming. There is near unanimous agreement that soil erosion is a problem of very serious proportions in Iowa. But we need occasionally to look at a half full glass of water as well as the half empty part.

Last year Iowa's landowners and operators had over $14 million of cost-sharing funds from Federal, State, and county sources. Farmers have voluntarily matched nearly all of these funds, and applications far exceeded available funds. No one can estimate the number who did not apply, knowing funds were exhausted. The State of Iowa was the first State to make cost-sharing funds available, and our State continues to lead in this effort. Many county governments also make cost-sharing funds available for conservation work.

Outstanding progress also has been made in Iowa in the adoption of conservation or minimum-tillage practices. About two-thirds of Iowa's farmers are now using some form of minimum or no-till practices on nearly one-half of the acres being cultivated. That represents phenomenal progress over the past 10 years. This State's Iowa till program has now been made available to all counties. Why do we still have problems of soil erosion after all these efforts? There are a number of reasons. Permanent conservation practices are expensive. The Iowa soil conservation districts' 1978 district resource inventory found it would cost $286 million annually in application and personnel costs to adequately treat Iowa's farmland. Conversion from conventional to conservation tillage can be costly in terms of machinery expense.

Farmers need to learn by doing and in adopting new farming practices. Both landlord and tenant must be agreeable to adopting permanent practices and conservation tillage. Inflation and cash-flow problems in the present farm economy make it harder to finance conservation efforts. All these and other factors tend to inhibit the progress needed to protect our farmland. Farm Bureau policy has long supported the concept that agricultural land is a valuable natural resource, and its conservation should receive the highest priority. We believe the primary responsibility for wise land use management rests with those who own or operate the land, and that local units of government, assisted by both State and Federal programs, can aid in the discharge of this responsibility.

Recognizing the need for governmental assistance in preservation of our soil resource, we are making these suggestions to this subcommittee: One, there should be a continued support for the Soil Conservation Service in providing technical assistance to farmers. The present proven structure in which locally elected soil district commissioners approve and authorize programs with technical services provided by SCS personnel must be preserved and properly funded. Two, a Federal program of cost sharing through income tax credits for soil and water conservation practices and structures should be implemented.

We support the bill sponsored by you, S. 569, and its companion bill, H.R. 2515, by Representative Cooper Evans, both of which give taxpayers a choice of either a full tax deduction in the year a qualifying soil conservation improvement is made or a 10-percent investment credit the first year with standard depreciation deductions the following years.

The $30 million annual price tag that is projected to carry out these bills should not pose a serious budget problem, although we were disappointed that provisions for this kind of soil conservation incentive were not included in the adopted Federal budget resolutions. Consideration should be given to providing income tax credits to provide an incentive for adoption of conservation tillage practices.

H.R. 3445 by Representative Tom Tauke provides such incentives for a 3-year period as a means of urging farmers to change to conservation tillage methods. This kind of Federal support would complement the Iowa till program now being funded on a limited basis with State funds. Federal funding of expanded research on cultural practices for soil conservation through land-grant institutions is needed. Research on best management practices for soil conservation, localized as to soil type, climate, and topography, should be an ongoing priority. Minimum- and no-till farming are the kind of practices that can be researched. demonstrated, and promoted by such research funding.

Five, because credit for financing soil conservation improvements is often not readily available, the idea of a loan program administered by the ASCS and patterned after the storage loan—facility loan program has merit. Many more permanent soil erosion practices could be made possible if a low interest loan could be easily arranged and readily available.

Six, continued support should be given to the Watershed Protection and Flood Prevention Act. Additional Federal funds would step up the tempo of the construction phase of the small watershed program. Prompt consideration and approval of watershed work plans at the Washington level would further enhance progress on this kind of conservation effort. Seven, Internal Revenue Service rulings must not be allowed to negate other governmental incentive programs. We understand the IRS is giving consideration to treating cost-sharing money received by farmers as income subject to income taxation. Such a ruling would be a step backward and would result in a diminished conservation effort.

I, however, carry a basic optimism that farmers with cooperation from various governmental units can and will solve the erosion problem and continue to produce large crops for both domestic use and

exports. My opinion comes from observing the rapid adoption of various conservation tillage methods in my area of the State and from the feeling that we are now just on the verge of widespread acceptance of going all the way with no-till/till-plant systems. I cite my own experiences to support this feeling.

During the past few years I have developed my farm into a modified no-till system. We make few trips over the field, use less herbicides and chemicals, apply only modest amounts of fertilizer but at a precise time and place; but in spite of this aggressive cost cutting, we have produced very high farm average yields.

The success of my system, which I call the profit-tillage system, has received considerable publicity in various farm magazines and newspapers. I guess that's kind of timely today. As a result, I have spent considerable time giving talks and showing slides on how to farm in a more profitable manner and have, as a side benefit, excellent soil erosion control. Interest is very high, especially among young farmers. The labor, machine investment, and fuel-saving features of the no-till/till-planting system gives young or beginning operators a chance to catch up with established farmers.

A variety of commercially built planters and cultivators are now available for farmers to use, whereas only recently many individuals had to modify and innovate conventional equipment to do the job. Variations of no-till/till-plant systems are now working successfully in all areas and soil types around Iowa and adjacent States. By demonstrating that it is more profitable to farm in a manner that saves soil, it is only a matter of time until the erosion problem will be solved. In summation, I feel the American farmer will continue to raise large crops for both domestic and foreign consumption and that farmers with a little assistance and nudging from various governmental units will solve the erosion problem.

Senator JEPSEN. Thank you very much. Your remarks are well taken. I gather from the statement, as part of your testimony here, in representing the Farm Bureau, the Farm Bureau's position is not mandatory but rather voluntary; is that correct?

Mr. STADTMUELLER. Yes; I think the Farm Bureau's position would be voluntary. I think the house of delegates is very definite on that.

Senator JEPSEN. What is your personal opinion?

Mr. STADTMUELLER. Well, my personal position, I'm a free enterprise person from way back, and I'm concerned that if we had any type of mandatory rules here, why it might—the rules and regulations set up might negate or wouldn't even allow an innovative, new idea that might be much more beneficial, so anytime you get into mandatory-type things, why you just, maybe, set back progress, and so my feeling is that I think the profit system ought to be emphasized. I mean, we ought to really emphasize to farmers that they can make more money farming in a manner that would save the soil.

Senator JEPSEN. Now, you have been using no-till and you have been receiving some national as well as local recognition for your work and attention. How did you get started using it? What prompted you to do this? Did your father use no-till, or did you start on your own. How did it happen?

Mr. STADTMUELLER. I think it's probably a system that's evolved over quite a number of years. Even my father, as a farmer, was concerned with soil conservation. He farmed on the contour. He had a few terraces way back in the forties, and ever since I came home from college, why I have been looking for a method to farm successfully by leaving crop residue on the surface because I felt that was one of the best ways we were ever going to get a handle on erosion control is to protect the soil at all times.

Senator JEPSEN. I'm pursuing this to get it on the record. You are recognized for using no-till. Now, I just want to know how you got started? Did you get the idea of leaving the residue on the surface from college, experimentation, or was it just crystal ball?

Mr. STADTMUELLER. No; I guess I have been an innovator since I was back in 4–H. I started with wheel-track planting then, which is where you plowed and then planted in the wheel tracks of a tractor, which was kind of an erosion control manner, and then when I came home from college, I used the chisel plow, I think, the first time in 1966. We had trouble with that method in the late sixties and 1970, and then our system has just evolved. We got going with till-plant system in 1975, and I have been improving it, always for the better, ever since, and I have a lot of confidence in it at this time, as witness the fact I go out and talk about it to many groups.

Senator JEPSEN. Thank you very much, Dan.

Now, we have Vivian Creswick, Pathfinders, from Cantril. Welcome, Vivian.

STATEMENT OF VIVIAN CRESWICK, PATHFINDERS RESOURCE, CONSERVATION AND DEVELOPMENT PROGRAM, CANTRIL, IOWA

Ms. CRESWICK. Good afternoon, Senator Jepsen, and ladies and gentlemen. Soil, a little 4-letter word; water, a little 5-letter word, but how vital. Conservation is a must, but how? Awareness may be one of the main ways to bring about conservation of our resources, awareness followed by education of the public. How about a big sell program? Our nation pulled together during the war when we had the common goal of victory. Why not the same psychology, as we are at war to save our soil. Public relation campaigns sell sugared cereal to the kids. Why not the same method to sell soil conservation and clean water? Instead of a CARE program overseas, why not a CARE program for the soil and water of the good old U.S.A. All people must be made aware of what is at stake and educated on the methods possible to maintain our resources to feed and clothe ourselves.

One way to encourage this is utilizing the R.C. & D. area program, which is a concept of local people who donate their time and effort and work together to solve local problems, utilizing the coordinator to bring together all groups, agencies, and peoples affected, a fine way to approach soil conservation at the local level with initiative from the same people who will remain there and monitor and maintain solutions achieved.

Our Pathfinders R.C. & D. area has promoted conservation by holding anual minimum tillage days and has done so for the past 5

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years. We invite you to attend our next one, January 29, in Ottumwa. We have promoted county bridge replacement by roadside structures, erosion control structures, warm season grass demonstrations, prepared critical needs inventory, and conservation tillage reports. We are exploring fly ash utilization and many other projects, including a conservation education camp recently held which was designed to reach teachers and students as well as concerned citizens. This camp should prove a valuable method of making people aware as the participants take back to their groups results of their planning and study.

R.C. & D.'s are a valuable resource of volunteer effort at the grassroots level and at no cost to the taxpayer. They can help conserve our soil and water and do it economically. This is important because of the budget crunch. Let's expand the role they play in resource conservation. After all, they represent a cross section of society, young and old, rural and urban, farmers, elected officials, conservationists, concerned citizens, all of whom possess valuable insights and expertise.

Other ideas consider the fact that consideration must be given to implementing a land-use program. Policies could be improved that would encourage development of the areas currently not used in the inner cities and on marginal land. In Europe and even the Far East, the regard for land is not taken so lightly. Why do we in America think we know it all and continue to waste instead of learning from other countries and civilizations. I have the utmost respect for some of the countries overseas that I have visited where I saw how they regarded their land use.

One method of encouraging development on marginal and for nonagricultural purposes has been suggested as a loan and grant program. How about the opposite approach and design a tax incentive to keep agricultural land as such. The only incentive at present is a special use valuation provided in the Federal estate tax law which is dependent on not only the death of the owner but a number of other requirements that have made it little used. In Iowa the death tax burden as well as the property tax burden falls heavily on farmland.

Any programs where the Federal Government is involved, improvement plans, loans, grants, and so forth, should require that projects be placed on marginal land, if possible, and include soil and water conservation protection measures. Some of the practices mentioned in the USDA organic farming study should be sponsored, as nondependence on chemicals will decrease pollution, lower overhead, and may save soil. Maintenance of federally assisted ACP practices should be required with a recorded agreement to assure they would be maintained even if the land changes hands. The State of Iowa recently passed such a law concerning State-assisted programs. As a taxpayer, I resent having a new owner take a bulldozer in and destroy practices that my dollars helped install.

Consideration should be given to the studies and plans that came as a result of Public Law 208 activities. Many hours of public participation were involved in these plans, and they should be implemented. Such utilization will encourage further concern for public input, encourage livestock on the farms, in Iowa. Many farmers have stated they will not plow the hills for row crops when livestock will pay.

Explore expanding markets for export of meat products rather than the grain, as so aptly recommended by Lauren Soth in a recent article in the Des Moines Register. Plan our exports so that our country is not shortchanged in the long run.

A tremendous loss of soil is experienced from the banks of streams and rivers, and this has not been addressed as a source of soil erosion. In our Fox River drainage district where we have an open channel, when a chunk of land the size of a two-story home drops into the water, many tons of soil are lost. Not only that, but it creates problems in the water and downstream. Very little attention has been paid to this type of soil erosion, and it should be studied.

In a recent trip to California I saw irrigation channels lined with concrete, channels large enough for a train. Other visits to the Northwest showed miles of concrete channels built to bring water to land that would not grow crops without irrigation, and that requires a yearly energy investment. Yet, here in Iowa we do nothing to stabilize stream banks, the same Iowa where God-given moisture permits us to grow crops without any yearly energy expense. Surely this is an incongruous situation and an area of soil loss long neglected.

Farm programs present another area of assistance. The program in the early 1950's was ill-advised when the corn base was computed as a result of the planning that took place after the previous program ceased to exist. When the previous program expired, many farmers plowed up the hills so they had a large base under the new program. This injustice was perpetuated each year that base was utilized, and it is still on the books. Farm programs should be based on what the land is suited for. Best management practices should be required also. A land improvement approach to watersheds has recently been explored by the Soil Conservation Service office in Iowa headed by William Brune. This should be encouraged.

You may wonder how I have come to some of these conclusions, and I might state I am a century farmowner. In fact, my husband and I did conservation tillage in our bean fields long before it became a common practice. I am a member of the committee that organized the Pathfinders R.C. & D. area. I'm assistant soil commissioner. Since 1969 I have been a trustee of the Fox River drainage district in Van Buren County, and I have served on the 208 committee since their inception. I'm greatly concerned about doing what I can to create a better soil and water program so that I can pass on an improved farming environment to my children.

In conclusion, may I summarize my thoughts by encouraging a strong R.C. & D. area program which can assist in many of these areas of soil and water conservation, a land use plan with consideration of incentives to maintain farmland, continuation of the organic farming study, required maintenance of ACP practices, utilization of the 208 plan, encouragement of livestock and exportation of meat products, stream bank erosion planning, farm programs based on land suitability with best management practices required, encouragement of land improvement watersheds, and a PR campaign to sell soil and water conservation by making the public aware.

Like one of Ding Darling's cartoons once portrayed, Mother Nature spent a million years providing a bounty of vegetation, soil, forests,

fish, wildlife, and water. Do we care enough to provide a CARE program for this bounty? Thank you for inviting me to attend.

Senator JEPSEN. Thank you, Vivian. How do you feel about mandatory versus voluntary soil conservation?

Ms. CRESWICK. Like so many others have stated today, I do not feel it is the right thing at this time. I feel if we could promote conservation by some of the means suggested here today that maybe we can get the job done without having to resort to that. You also asked for new ideas, and this afternoon I thought of another one that I did not include in my presenation. A tax incentive might be a depletion allowance on income tax returns, and I think this would be very favorably accepted by landowners.

Senator JEPSEN. What are some of the project measures being installed in the Pathfinders resource conservation, and development project?

Ms. CRESWICK. We have some roadside structures that have been installed.

Right now there are several roadside structures that are being put in place instead of bridge replacements; we have the switch grass demonstrations; we have these Canadian geese that you mentioned earlier; and many programs are underway. I might say we have only been funded and had a coordinator for about a year now, but we have lots of interesting plans, and I must say the interest has been great among the six counties that are in Pathfinders.

Senator JEPSEN. How are these measures being accepted by the local people in the community?

Ms. CRESWICK. Well, of course, the local people are the instigators to bring the problem to the coordinator, and I think the people are very interested, and, in fact, we have many more projects than the funding will allow assistance to be given.

Senator JEPSEN. In your opinion, could the work done in the R.C. & D. projects be done by other organizations?

Ms. CRESWICK. To a degree it could, but the beautiful part of an R.C. & D. program is that the coordinator can reach out and bring together all the different facets, and this is something that has not been the practice in the past, and an R.C. & D. group can go to all of the governmental agencies and all of your private entities and has a broad program where he can contact people and try and get them to work together and find funding wherever it is available, and the local entities or groups that need a problem solved can be benefited this way in a method that does not seem to be available from other sources.

Senator JEPSEN. You mentioned switch grass. Is that a fairly new project?

Ms. CRESWICK. Yes; it is a fairly new project in our area. We have an area plan and other information that could give you more details about what we are doing and we would be glad to provide that to your office. We have one that is just being updated, and we will give you all of the information on the projects we are pursuing.

Senator JEPSEN. It's a fairly new project for a very old grass that was present when we first started farming. We have gone full circle and come back to it because it is warm weather grass. Is that right?

Ms. CRESWICK. This is a method of promoting it and educating the farmers in the area, and this is one of the things that can be done at relatively low cost.

Senator JEPSEN. Thank you very much, Vivian—very enjoyable and informative.

Sandy Kongable from the Geode R.C. & D. from Winfield, Iowa. Nice to see you again, Sandy. Thank you for coming and sharing with us, and you may proceed.

STATEMENT OF SANDY KONGABLE, CHAIRPERSON, GEODE WONDERLAND RESOURCE CONSERVATION AND DEVELOPMENT EXECUTIVE BOARD, WINFIELD, IOWA

Ms. KONGABLE. Thank you, Senator Jepsen, for providing this opportunity to bring observations and views regarding our Nation's most important natural resources, our soil and water. I speak to you this afternoon as chairperson of Geode Wonderland Resource Conservation and Development, R.C. & D. executive board, which represents Henry, Lee, Louisa, and Des Moines Counties in southeast Iowa.

Senator Jepsen, our Nation is facing a critical issue that parallels the once productive Jordan River Valley of Biblical times. Our Nation's topsoil is being ravaged and abused at a rate that, if allowed to continue, will severely limit our ability to produce food for the world that is plentiful and affordable. Unfortunately, economic conditions and agricultural policy have encouraged many Iowa farmers to intensely crop these farms for short-term-economic returns.

Our water quality is being threatened by a variety of pollutants. Recently, the term "nonpoint pollution" has become popular in the discussion of surface runoff from our agricultural lands. Sediment has been repeatedly documented as the largest water pollutant by volume. It's a sad fact that a substantial portion of the most productive food base in the world has left Iowa's borders in the form of sediment. This sediment is a major factor in water pollution. In the future it will also be a major factor in our limited ability to feed our Nation and the people of the world.

As a farm wife, as a teacher, and a long-serving volunteer, I have a deep concern that we need to aggressively address this problem now, instead of waiting to deal with the problem after the resources are no longer present. The solution to this problem will not come easily nor will it come from one sector. And, further, government can't nor should it be the only sentry responsible for guarding the Nation's resources. Government must work cooperatively with all sectors to define critical problems and design workable solutions. Government can exercise a leadership role in bringing people together to work on problems. I want to share my thoughts on one such approach.

Resource conservation and development is a locally directed program guided by a working relationship through the Soil Conservation Service in the U.S. Department of Agricultural. R.C. & D. is the only rural development program available with strong emphasis on protection and development of community resources to meet local human needs. R.C. & D. provides minimal staff support to work directly with volunteers as well as to coordinate ideas and resources from other agencies.

Each county program is directed by a volunteer board who represent a cross section of the entire county. Local problems are discussed and the volunteers then explore the extent of public support for the issue. Together they make decisions about attacking the problem. Because project ideas begin at the grassroots level, and R.C. & D. enjoys the flexibility of local control, we find that we can bring together many various groups and their resources. We stress broad base cooperation, and this approach has frequently allowed R.C. & D. to assist in a problem solution that one group or agency working alone cannot address.

Currently our Geode Wonderland R.C. & D. is working to develop public awareness and promote positive action: One, to reduce the drastic rate at which our topsoil is being eroded. Two, to establish a land use policy for prime agricultural land. Three, to provide quality water. Four, to establish additional wildlife habitat and recreational opportunities. And five, to improve the standard of living in southeast Iowa.

Senator Jepsen, I know that you have encouraged the expansion of volunteer opportunities for conservation programs. Geode Wonderland R.C. & D. urges you to continue to be a strong advocate for this concept, and we feel that the R.C. & D. program offers a vehicle for this type of cooperative effort. What better way to increase the value of the taxpayer's dollars than through using volunteer time and energy and a coordinated agency approach to promote conservation and development of our human and natural resources?

We have many concrete examples of projects supported by R.C. & D. that provide evidence for the success of this program: One, native prairie grasses are again being seeded to prevent wind and water erosion. Two, a lake was developed as a part of a watershed program that also benefits the nearby town through increased recreational opportunities. Three, an aggressive no-till farming campaign is being waged in cooperation with soil districts that includes providing equipment, education, and technical assistance to farmers. Four, stabilization of river and roadside banks.

Time doesn't permit citing other projects, however, my point should be clear. These projects, and many others like them, illustrate what happens when local people decide together how best to resolve local problems. R.C. & D. facilitates cooperation among local entities that leads to action. The program is locally controlled. What other Federal program will allow this kind of flexibility in addressing local, rural development problems? Recently, the Des Moines County R.C. & D. board reported on the no-till farming project at the Iowa Army Ammunition Plant near Burlington. This project tests various tillage systems under actual farming conditions. It would have been very beneficial to those organizing this project if the Federal Government had a stated policy guiding the actions on federally owned cropland. Not only would it have helped in this particular case but it would serve as an example to the private sector of the Government's concern on conserving our soil resource.

Our Geode Wonderland executive board determined to ask President Reagan to issue an executive order directing all military commands and heads of civilian agencies controlling Federal land being farmed to insure that no-till farming practices are followed. At pres-

ent almost 3 million federally owned acres are planted in crops. Conservation tillage could reduce soil erosion, save energy, and conserve water in the farming of this land. Of even more importance, issuing the directive would both be symbolic of the Government's commitment to halt the loss of our most precious natural resource, topsoil, and demonstrate to farmers the advantages of using these practices on private land.

We appreciate the efforts you and Congressman Leach have made to encourage Presidential action on this issue, Senator Jepsen. We believe that an aggressive national conservation policy needs to be promoted by our elected officials. Concerned local people have made this request for a Presidential Executive order because we know that small, grassroots ideas can sometimes have far-reaching effects. Our Geode Wonderland R.C. & D. executive board urges you to vigorously pursue this request for decisive Government leadership.

Iowa has been fortunate to benefit from a growing R.C. & D. program. We have, however, experienced a problem resulting from the national uncertainty of making a permanent commitment to the R.C. & D. program. This hinders our abilities to plan long-range projects that require major funding efforts. Our efforts to promote soil and water conservation would be greatly enhanced if Congress would make R.C. & D. a permanent program with increased funding. Most projects generate local support to pay for the majority of the improvements. What better way to maximize Federal revenues.

Senator Jepsen, as you deliberate with your colleagues to draft new legislation that affects rural America, I ask you to consider carefully the importance of the R.C. & D. program. Our board urges you to support this valuable rural development program. We believe that volunteer energies working hand in hand with limited professional staff to define local programs, set priorities, and take action to solve our problems offers a cost-effective method. This program needs to be promoted and expanded. Our country will benefit. Thank you.

Senator JEPSEN. Thank you, Sandy. As you know, what you suggest with regard to the military personnel is included in the farm bill. Whether it will remain there or not remains to be seen. It's not without problems in that some of your federally owned land is in the reservation area. To apply additional chemicals, especially on parkland, I find out is extremely dangerous for fish and related life. One solution brings up another problem elsewhere. Sometimes individuals get the feeling, like I'm sure a lot of people feel in our country today, the harder one works the further behind he or she gets. However, we will go forth with those suggestions. They are being considered, and I do thank and compliment you for your leadership in this area and for providing these ideas. It was your suggestions, I know, that gave us the idea that prompted much of the work in Washington. Thank you for that. What is your feeling with regard to voluntary versus mandatory soil conservation?

Ms. KONGABLE. Well, I believe strongly in volunteering, otherwise I wouldn't be a volunteer myself, and I think you get much better results with volunteering than mandatory.

Senator JEPSEN. Thank you very much. You bring to the leadership position which you hold a combination, again, of teacher and activist

in the community. I know you are active in government, and it's a good combination. Thank you for all you are doing.

Ms. KONGABLE. Thank you.

Senator JEPSEN. Sam Jennison, Des Moines County, southwest conservation district commissioner. You may proceed. Welcome.

Mr. JENNISON. Thank you, Senator.

Senator JEPSEN. You have waited a long time.

Mr. JENNISON. Well, between the time that I started I've also been to the doctor's office, so it can't be too bad.

Senator JEPSEN. I wonder, did this hearing make you ill.

STATEMENT OF SAM JENNISON, COMMISSIONER, DES MOINES COUNTY SOIL AND WATER CONSERVATION DISTRICT, BURLINGTON, IOWA

Mr. JENNISON. Well, it started to make me ill, but I'm back anyway. I was raised on a farm in northeast Iowa and graduated from Iowa State University in civil engineering. I presently own 500 acres of agricultural land in Iowa, am president and co-owner of Riley Bro., Inc., Burlington, a paint manufacturing company, and have been soil conservation commissioner in Des Moines County for 3 years. I assume that we all agree that our soil is eroding faster than is acceptable. I want to clearly point out that such a situation is not only a national problem, it's a national disgrace. While attempting to solve the problem locally, we have arrived at some facts that, I believe, should be shared with you.

Once we, as a nation, recognize these facts then we, as a nation, will be better able to establish objectives and plans to fulfill our purpose. I must assume we all agree our purpose is to stop excessive soil erosion before irreparable damage is done. We have found these things to be true here in Des Moines County. At the present rate of soil erosion Des Moines County will lose its topsoil on 50 percent of its prime agricultural land in 40 years. That is the year 2020. We will be just like those folks down in Missouri. It's happening.

Treating this problem as we have over the past 30 years is no solution. We have historically used public funds to cost share the installation of tile outlet terraces on private land. This has been the main thrust of our national policy. To solve the problem at the present level of funding would require 400 years. Yet, to increase the funding, to complete the solution in 40 years, is impossible, and I think we have been told that several times today. There is only one solution economically feasible, and that solution involves changing tillage systems so that adequate trash is left on top of the ground. We have found no national policy in place which emphasizes tillage as a solution to soil erosion.

Now, I would say that we see a change now coming, but up until this point we really have not had a national policy of that magnitude. In fact, there are too few people in the Federal, civilian, and military agencies who do not recognize or who can recognize different tillage systems. There is a desperate need for research in chemical, machinery, and tillage development.

Last but not least we have found this: When farmers are given facts and an opportunity to utilize new methods, they will act in a responsible manner. What then can we do as a nation to utilize these facts in finding a solution to soil erosion.

One, Senator Jepsen has assisted us by requesting that the President direct that Federal lands utilize no-till tillage methods, and we want to thank you for your assistance on that, Senator. As stated in the past, this small action will set the tone for the Federal policy. Recognize that the cost just to do this is relatively nothing, almost zero cost.

Two, the Department of Agriculture needs to follow this effort with a concerted effort to market changing tillage systems as high priority. Terraces should be installed in conjunction with proper tillage systems, not instead of.

Three, Congress, themselves, as Senators and Representatives, needs to gain knowledge relating to tillage systems and erosion. Only then can Congress make wise decisions relating to the national policy. We need to get some of them folks out in the middle of these Iowa cornfields.

Four, we must see that research be increased on chemicals, machinery, and tillage systems as they relate to erosion. The Federal agencies have an excellent opportunity to do this through the utilization of Federal lands, such as the Iowa Army Ammunition Plant.

Five, we must keep technical assistance provided by the Soil Conservation Service strong and viable. I think its record is good now, but I think with some additional national leadership and direction it can lend even greater assistance.

Six, above all, we must not fall into the trap of just throwing money at this problem. Just as conserving soil is a must, so is conserving tax dollars, time, and space. Conservation is nothing more than exercising discipline. Discipline is really the solution. We need your help in reestablishing a nation's discipline, training that corrects, molds, or perfects the mental faculties or moral character. Thank you.

I would want to pass on to you one other item. At our last meeting, which was last week, our soil conservation commissioners voted to approve, as a statement to you and your body, that we would support a tax credit, and we think in the area of 50 percent tax credit, in lieu of the cost share systems that we are now using. In fact, we believe that the cost share systems that we are using today is not assisting soil conservation, it's holding it back, because we have people lined up waiting for those funds to come, and you and I know there is never going to be enough money, so instead of getting it done we are waiting until the funds are coming, and they are not going to be there. I would pass that on from our board of directors. Thank you, Senator. Any questions?

Senator JEPSEN. Yes, the standard question, first of all, is the voluntary versus the mandatory.

Mr. JENNISON. The only answer to that is soil conservation is mandatory which is required by a higher power than exists at either the State or Federal level. Should we legislate at the Federal level or State level conservation methods? No; I think that is an irresponsible government that would do that. I think if we carry out our responsibilities as leaders, get the research done, get the knowledge out and

market it to these farmers, you are not going to have to worry about conservation methods being put on the land, but I'm afraid our leadership spends too much time writing plans and programs and establishing organizations and we are not getting funds on the land, Senator.

Senator JEPSEN. I would like, for the record, Sam, if I may, to inject here what may come up later and hasn't so far. That is the better understanding of soil tilth makeup, how to better use it, and trying to encourage establishment of a center in Iowa State at Ames, hopefully, some way or another wrangle some assistance and get that started off the ground. I think we probably will find, as we many times do when we try to solve a problem, we need to really understand what we are working with, and I think there is a lot to be learned yet about composition of soil and how it interfaces with the particles, with the water, how it works, replaces, revitalizes itself, and so on. That's something, I think, we should promote. Do you agree?

Mr. JENNISON. Well, I agree, except what has been happening in our whole society, we have been spending literally millions of dollars reinventing the wheel. I got into a tilth problem and a tilth discussion up in Cedar Rapids one evening at a no-tillage demonstration, and one of the good farmers there said, well, that tilth is pretty interesting. He says, I'll tell you how to figure out whether your soil is tilthy or not, and if you want to know what tilth is, go out in the middle of the woods and kick your heel in the ground. That's tilth. That's Mother Nature's tilth, and those farmers probably know more about tilth than the universities are going to find out in the next 10 years, but they are going to get the money, and then we are still going to have no money on the land, and I think it's wonderful to rediscover tilth, but I don't know that it ought to take a whole lot of funds. Did I answer the question, or did I confuse you?

Senator JEPSEN. No; you didn't confuse me. You gave me a little different slant on it. I got your message. You are right, I was certainly not advocating that as a total solution, but your point is well taken. I felt that same way, and your answer was probably even made more vigorous than mine was when we first came in this year with the proposed farm bill from the USDA, and it had nothing with regard to soil conservation. In fact, the message came along and said we will have our soil conservation plan in December of 1982. I couldn't believe it, and I said so immediately, and so we moved it from December of 1982 to January of 1982, and now we are down to, I think, the second week we get back. but I couldn't agree more, we need some action.

Mr. JENNISON. Well, if I could pass on anything that I have found in my 3 years as a soil commissioner, there is a great amount of underlying feeling in the commissioners throughout the State of Iowa, they are damn sick and tired of plans, programs, hearings, Federal moneys. We want some action, and we are not going to take some more funds being put into some organizations. There are solutions to the problem if we can get the people at the Federal level to listen, and that's our biggest problem is to just get folks at the Federal level and in Federal agencies to listen and hear what we are saying, and it's not just here in Des Moines County, it's throughout the State of Iowa. How do you make Senators listen and understand?

Senator JEPSEN. Well, I don't know if the listening is probably easier than the understanding, but, seriously, I would, on the other side of the coin, say how do you get the bureaucracy to respond, and maybe listening and understanding is the first part of it. I have a desire to listen and understand, to open up and get the same thing you are talking about, to get action, and in more ways than one. Not just within conservation but with many other areas, it tries one's patience, I guess that's a nice way to put it, to deal with the bureaucracy, and sometimes the indifference, and sometimes a combination of indifference and arrogance, the tail wagging the dog, we know better what's best for people than you do.

That's what happens when you drink some of that Potomac water back there. Some people go to Washington and they grow. Others go there and they just swell. We have had too much of that. We are trying to work on that. I just wanted to assure you that I am as concerned as you are about it, and I would be more than receptive and welcome and invite right now, publicly, that you help in giving me suggestions of how we can get this action. I'll guarantee you we will get folks to listen, and if they can't understand, we will try to ascertain whether it's because they don't understand or because they really don't want to, and if it's the latter, if they don't want to, I don't think they will be around long.

Mr. JENNISON. Well, hopefully that's true. I would remind you that that bureaucracy which we are both concerned about and that Government that we have a difficult time governing was voted on and put together by Congress. Now, if Congress can make it, Congress can destroy it. I can't do much, only that which I have the responsibility for, and that is, I think, where we're at, and, you bet, you'll hear from me again, Senator.

Senator JEPSEN. Very good. Thank you, Sam.

Howard Bright. Could we hold the question until the end, I would like to keep moving here. Howard Bright, district conservationist, room 230, Federal Building.

Mr. BRIGHT. Well, thank you, Senator.

Senator JEPSEN. You heard what Sam said now, Howard. Do you have some suggestions?

STATEMENT OF HOWARD BRIGHT, DISTRICT CONSERVATIONIST, SOIL CONSERVATION SERVICE, BURLINGTON, IOWA

Mr. BRIGHT. Sam pretty well covered the material that I wanted to cover, along with Sandy back there. I think they both did me in as far as mine is concerned, but I'll give it anyway. I would point out again my name is Howard Bright, I'm a district conservationist here in Des Moines County. The district conservationist, of course, works for the Soil Conservation Service, which is a Federal agency, and I don't think too many Federal employees get to sit down and voice their opinion what they think about their own job and about their own profession, and I appreciate this opportunity to be able to sit here as a Federal employee and express my own opinion.

I thank you for your efforts in trying to get this no-till farming on all the Federal lands, as Sandy and Sam have pointed out. We in

the soil conservation business know that there is no better or more efficient way of controlling soil erosion on cropland than no-till farming. As a matter of fact, if we just face the facts, the way we are cropping our land today, using corn and soybeans, we can terrace all of that land. As long as we got a continuous corn-soybean rotation, there is no other practice that we can think of that will control erosion.

It's not a matter of whether you like it or whether I like it, it's just the basic fact, there is no other way to control erosion, and even at that, on some of the slopes that we are farming, you still cannot bring the soil losses down to allowable limits because the farms that are being farmed are on such steep slopes that they are not suitable for row cropping, so we are at a point in soil conservation that we are stretched beyond our means of coming up with ideas on how to protect it, if it's continuously row cropped.

Like any idea, concept, or even proven fact, people must understand and be provided with adequate knowledge and tools to responsibly undertake any new innovation. While no-till isn't new, it certainly is to the farmer who is still using the moldboard plow. Conventional farming methods can be soil's worst enemy. In Des Moines County alone, and during just this growing season, we have received enormous rainfall, causing severe erosion in excess of 200 tons per acre on some farms, and these farms exist right down around Geode Park where the lake is. We have received excessive erosion in that area. Had these areas been protected by crop residues, as they would have been if no-till farming had been used, there would have been little damage sustained. The question then is why aren't farmers using no-till if it is so effective in controlling erosion.

As Sam pointed out, we think it is because of a lack of knowledge. Since no-till and conservation-tillage systems can be implemented quickly, they are efficient measures to control erosion. The cost of terracing and other structural means of controlling erosion has skyrocketed. At our present rate of application these structural measures will take 325 years, as I figure—Sam figures 400, but that's pretty close—to just treat Des Moines County. All of our topsoil on sloping land will be gone by that time.

We are, therefore, obligated to find a viable means of controlling erosion before our topsoil is completely eroded. With this idea in mind, the soil conservation district of Des Moines County set out to provide farmers with the knowledge required to shift their operations to no-till. You, Mr. Jepsen, are here today to hear ideas on how soil can be saved. The Federal Government can go a long way in setting an example by using the most advanced conservation practices on their own land. The Federal Government should not ask farmers to do something they are not willing to do themselves.

We in Des Moines County have a Federal installation called the Iowa Army Ammunition Plant. They have worked hard to combat soil erosion on cropland and have always been cooperative with the soil conservation district. Without the cooperation of the commanding officers, such as Colonel Reinhart, Colonel Snow, and Colonel Shumacher, our efforts would not be possible. We have had extensive cooperation from the Department of Army, and some of these fellas have been completely reeducated, or educated period, as to the facts of soil erosion, especially on the Army Ammunition

property. I think it behooves us to give these fellas credit that have moved in, not knowing what soil erosion is, and be willing to do something about it

Knowing the success and cooperation that we have had with the Department of Army and plant agronomist, like Winston Cooper, the soil conservation district decided that there could be no better place to gain knowledge of tillage systems. The Iowa Army Ammunition Plant, comprised of 19,000 acres of land, leases approximately 7,000 acres of land for agricultural production.

In a concentrated effort, the soil conservation district worked with the U.S. Department of Army, Iowa Department of Soil Conservation, Soil Conservation Service, Iowa State University, Iowa Extension Service, farmer Don Nelson, and Iowa Senators "Frosty" Schwengels and Dale Tieden, and several other influential legislators, in establishing a tillage research project. The purpose, here again, is to provide farmers with necessary knowledge about no-till farming so that it may be adopted and thereby prevent excessive soil erosion on cropland.

After money was appropriated by the Iowa Legislature, a project was designed by Iowa State University, Department of Agronomy and Agricultural Engineering, in cooperation of all agencies involved. The objective of the project was to compare the effect of different tillage systems on crop growth, soil properties, and cost, and amount of materials used in the production of corn and soybeans on Taintor and Mahaska soils in southeastern Iowa.

The project is conducted on farmland leased to Don Nelson; and regardless of what anybody says, he's not getting paid any extra money to farm this land. He leases the land just like any other tenant out there, but on top of it he has to manage the project and collect much of the data for Iowa State University. Don Nelson is a farmer from Danville, Iowa. He's farmed out there for 20-some years, I think. All fieldwork is performed by Mr. Nelson and his operators.

There are, approximately, 432 acres of land in this project. The project is divided into two studies. One study deals with crop growth, and the other looks into the economic situation. Both studies compare yields among different tillage systems. The crop growth study also compares tillage system effects on crop growth and soil properties. The economic study compares different tillage system effects on the cost and amount of materials used in crop production. The different tillage systems being compared are conventional tillage, reduced tillage, and no tillage or, sometimes as it's called, slot tillage. As data is collected and analyzed from the study, it will be given to farmers and interested people. Farmers will then be provided with factual information based upon valid research. This is the first time a study and research project has been done on this large a scale using actual field conditions and farmer management. The attention and information already generated from this project has raised the awareness of many farmers.

The fact is that most farmers are willing to change tillage systems if they can be shown and convinced that it is practical and economically sound. By using Federal land to promote up-to-date soil conservation practices, we practice what we preach and set an ex-

ample. This builds trust between Government and private citizens. Thank you. Any questions?

Senator JEPSEN. Thank you very much, Howard. I should ask you, do you feel that soil conservation should be mandatory or voluntary?

Mr. BRIGHT. Well, unless I'm wrong, soil conservation is mandatory in the State of Iowa, and the commissioners, I think after the last session, were given the power and the authority to hold people to allowable soil loss limits in the State of Iowa just by merely pointing a finger to those areas that are excessively eroding. Like I say, if I have interpreted that wrong, somebody correct me. Commissioners I do think have the authority and the power, so it is mandatory.

Senator JEPSEN. Is there anyone that disagrees with that statement? We have got several board members, several legislators here. None.

VOICE. I hope they use discretion if they implement it.

Mr. JENNISON. I think the correction should be it can be mandatory at the local level if commissioners so choose.

Mr. BRIGHT. It's in the law that commissioners can, if they so choose, force a landowner to bring soil losses within allowable limits to my understanding.

VOICE. I have to agree with that. As a matter of fact, it's more power than I, as a commissioner, really want.

Mr. BRIGHT. And I didn't like that ride today because there are a lot of commissioners in this room, and there are also a lot of these commissioners that are farmers. I have some other comments to that mandatory. I do think if we visualize and we know that our soil is a limited resource, that we only have a limited amount of time—in Des Moines County on some of our soils, less than 25 years before they go under as far as the topsoil is concerned—then the farmers certainly can be asked to bring his soil losses within allowable limits, however he chooses. In other words, I don't care whether you use strip-cropping, no-till, whatever it takes. Is that too much to ask to bring the soil losses within allowable limits? Now, I guess that's mandatory, but that's the way I look at it.

Senator JEPSEN. OK. Yes?

VOICE. Getting back to that mandatory law that the legislature has set out, if I interpret it correctly, the farmer is only forced to spend a maximum of $10 per acre on whatever the structure is involved in lowering the soil loss, and he also become eligible for 75 percent cost share, 25 percent his share, if there's a complaint filed against him, and, to me, that's really subsidizing somebody for his poor soil loss practices, but that's the way the law is set up.

Senator JEPSEN. I'm aware that's the way the law is set up, and I had the same question you did when I phrased it a couple weeks ago in southwest Iowa. You are paying the rascal, who refuses to do anything, much more than the person who, on his own, wants to conserve soil. I think there's a little twist there that either I don't understand very well or it ought to be changed. What do you think about that? Is "Frosty" gone? He's left. Do you have any comments?

VOICE. Well, I think, Senator, we had one case similar to what you are talking about where there's a severe problem made. I think, here again, Ollie Kaldenberg and I were involved in that in trying to get it solved at a level where the people just meet rather than take them

to court. We did have another case in Mahaska County that created quite a little problem. Did they finally get that resolved, Ollie?

Mr. KALDENBERG. Yes.

VOICE. But it's very difficult and a long struggle to get something to happen like this.

Senator JEPSEN. I think we have to move on now. Thank you.

Mr. BRIGHT. I have one other comment on cost-share rates. My own personal standpoint in the cost sharing we have is a joke, and I think it's an impediment instead of helping the farmer to get conservation on the land for the same reason that Sam stated that people are sitting around waiting on that cost-share dollar; and when you have anywhere from $50,000 to $170,000 in cost-share, you can spend all of that on three or four or five or six farms, and the other farmers are left sitting waiting, waiting, waiting year after year so the conservation does not get on the land.

Senator JEPSEN. Thank you. And thank you for your comment, Bill McGrath. He's been a longtime—forever as far as I can remember—leader in many things in Iowa. He worked for the Department of Transportation but was a leader in soil conservation from how many years ago?

Mr. MCGRATH. I have forgotten now, Senator. Six years on the DOT, and now with the Rail Finance Authority, and many years before that, back in the 70's, with the Soil—R.C. & D.

Senator JEPSEN. Mike Vincent, farmer from Keota. Welcome, Mike.

STATEMENT OF MIKE VINCENT, KEOTA, IOWA

Mr. VINCENT. Thank you Senator, for allowing me, a young farmer, to testify before you today. Four years ago I was at a desk in a production credit office, and I had a lot of answers for at the time what seemed like not so difficult problems. On that day I was assistant manager at the office. Today when I go into the PCA office, I sit on the other side of the desk, and I have a lot of questions, most of them complicated and few of them answered. The difference is now I'm the proud owner of what I might have referred to 4 years ago as a problem. I farm 310 acres of contoured no-till row crop with an additional 200 acres of custom work. Soil conservation needs, soil loss, and the protection of our resource base brings discussions of conservation challenges, opportunities, strategies, plans, crises, education, and many other scenarios.

People speak of lack of interest, lack of enthusiasm, lack of dedication, and lack of understanding resulting in inactivity or lack of conservation. Is it inactivity by the farmers, the Government, or the voting populus? It may more seriously be inactivity by the Congress, itself, by not making conservation economically advantageous. In farming today we face narrow profit margins, high interest rates, and spiraling inflation. The fact is it is not profitable to do permanent conservation measures. It has and continues to be a choice between survival and conservation. In other words, food and clothes for the family versus a terrace in an eroding cornfield.

Conservation ends up not being a choice. If we are to maintain our resource base, the soil, and I believe we must, then adopting soil

conservation measures must become economically more advantageous than not using conservation measures.

I want to address why more farmers do not engage in good conservation practices. The need for Government to more vigorously defend against the serious erosion of our Nation's prime resource and to leave an understanding of the need for economic advantages in using soil conservation. Review an average farming system based on my home area, Washington County. This will create a very realistic economic farm situation with respect to cost and return of soil loss control needs, compared to family survival and a lack of short-term dollar benefits for conservation practices. This average farm in Washington County consists of 275 acres. It has 250 acres of row cropland. The remainder is pasture, trees, roads, and buildings. Twenty-five percent of this row cropland is flat with minimal protection needed for erosion. Fifteen percent is wet and 60 percent of it is washing away. This average farm produces approximately 20,600 bushels of corn, 3,750 bushels of beans, 675 bushels of oats or wheat. Based on an average price, this results in an approximate gross income of $87,500. Production costs total $74,500. This means an average farm income of $13,000 before taxes, excluding the livestock operation or a spouse working off the farm.

When we look at bringing the cost of this farm within soil loss limits, we see a price tag of $95,000. This $95,000 means having a contoured no-till cropping system with 105 acres protected by tile outlet terraces and waterways, 38 acres with title drainage systems, and a pond for the gully in the pasture. A farmer is now faced with a choice. Does he build a terrace, buy a new no-till planter, or does he buy food for his table? He's faced with an economic squeeze, and the overall profitability of the farm refuses to allow him to practice good conservation measures.

Farm income should benefit by doing more conservation. It should not be less by using solid conservation systems. Our great Nation must protect its resource base and defend our prime food and fiber production lands from the erosion blight. The Federal Government must make it economically advantageous to practice good conservation measures. Our existing agencies must use all available tools and restructure to create the proper environment to achieve the critically needed level of conservation on the land. Our present system for soil conservation adoption by farmers provides cost-share funds for permanent conservation measures. Many counties continually run short of these greatly needed cost-share funds. But, regrettably, in a few cases some of the funds are used for nonconservation measures. The system alone does not even begin to meet our conservation needs. We desperately need additional incentives.

Let's begin with the 40-percent-investment credit on approved, permanent soil conservation measures. This would be an alternative to receiving the present 50-percent cost-share funds. While still retaining the existing program, this would allow increasing numbers of farmers to apply soil conservation measures, yet allowing those unable to utilize investment credit to take advantage of the present cost-share program. Certification of funds expended on approved soil conservation measures could be made through the soil conservation districts similar to the existing cost-share procedures.

Second, I recommend an additional 10-percent-investment credit for no-till farming equipment. This is a method of farming that is cost efficient and does an excellent job of reducing soil erosion. No-tillage has been slow in acceptance in the production of crops. This tax incentive would provide the encouragement for farmers to purchase the equipment and to begin using this practice and understand and receive the benefits it provides in controlling soil erosion.

Third, I would recommend a program of information that regularly supplies each farmer with his soil losses and the areas of his farm at or below accepted soil loss limits. This could be accomplished as a farmer certifies his cropland acreage at the ASCS office. He could also certify his tillage methods and residue covers for each field. This data, when transferred to the Soil Conservation Service, can be combined with soil types and the percent in length of slopes to tell us the soil loss on our individual fields. We can utilize this information as a basis for added incentive programs. The use of this data alone would be a basis to justify the additional cost of any added staff and equipment needs for the program.

Fourth, once the soil loss limits have been determined on a farm, we can provide an incentive for those areas which meet or maintain soil loss limits or penalize those areas which do not. This can be provided through an ag-land tax credit or surcharge. A surcharge in the amount of $5 per acre or a tax credit in the amount of $5 per acre would apply to either those areas above or below soil loss limits. This charge could be assessed through a computer operation in the Soil Conservation Service office utilizing information obtained through the certification by farmers in the ASCS office. Reporting of the tax surcharge or credit could be done through a document generated at the soil conservation district office similar to a W–2 form. Attached to the Federal income tax return the form would indicate the charge or credit to the final tax figure due to the Federal Government.

Obviously, there is no need to include flat ground in this type of a program. Excluding all ground with less than 2-percent slope from either the surcharge or tax credit would be appropriate. A change in the certification deadline would need to be made by moving it from September 1 to June 15. This would allow the soil conservation office to spot-check on the residue coverage reported by each farmer. It would also give sufficient time to provide all the soil loss figures for each of the farmers' fields. The farmer in this program who would fail to certify the necessary information would automatically have a $5 surcharge per acre on all his land. In Washington County we have approximately 300,000 acres of row crop; 225,000 acres are 2 percent or greater slopes; 175,000 of these acres exceed soil loss limits. This program would generate approximately $625,000 net revenue today in Washington County. A generation of these funds would more than offset the cost of the program to determine soil losses for each of the farms, and the remaining funds could then be used for another conservation program.

I would recommend a long-term, low-interest loan program to build permanent conservation measures. These funds would be available to cover the farmers' cost of the practice, and the remaining cost would be taken up either through cost-share funds or the 40-percent-investment credit. The ag-land tax, the 40-percent-invest-

ment credit on permanent soil conservation structures, the additional 10-percent-investment credit on no-till equipment, and the long-term loan are my attempt to develop a system that would make conservation more economically advantageous. Using this system we could expect to have 85 percent of our crop ground within soil loss limits at the end of 5 years. A far cry from the existing 25 to 35 percent accomplished to date. But the biggest step we can take, with little cost to our Federal Government, is to provide an incentive for a no-till farming system. No-till is the one practice that can take the single largest step toward meeting our Nation's goals for adequate soil conservation. No-till is cost efficient to use, and it can be implemented much faster than years of terrace building. On my own farm no-till has reduced my soil losses from 85 percent to 95 percent. We must begin today to take effective steps to make conservation economomically advatageous; for if we fail to begin, it is not us who will necessarily suffer from the erosion blight, but it's my children and their children's world. Thank you.

Senator JEPSEN. Thank you, Mike, and very well done. Do you feel that soil conservation should be mandatory or voluntary?

Mr. VINCENT. I think with the proper program that you can make it so that it's not necessarily mandatory but so that it's more beneficial for the farmer to do it economically as opposed to ignore it. If he wants to waste the soil, if he wants to fall-plow bean ground, you know, let him pay, let him pay for the use of wasting that ground.

Senator JEPSEN. You are saying it should not be mandatory, you just want to punish him a little if he doesn't do it.

Mr. VINCENT. Yes; twist his arm.

Senator JEPSEN. Mike, do you feel that lending firms and agencies who extend credit give the right priorities to controlling soil erosion when they loan money to a young farmer? For example, to purchase land? Should there be any consideration for soil conservation when they do that?

Mr. VINCENT. I don't think that our farm economy is structured so that we can afford that at this point. Things are so tight for young farmers, as myself, that we can either afford it or we can't afford it. If we can't affort it, you know, there is no point in looking at it because we are out there trying to work with our banker to get the funds to survive anyway.

Senator JEPSEN. Have you ever heard of any loan institution requiring soil conservation practices to be installed when they loan money?

Mr. VINCENT. No.

Senator JEPSEN. Ever heard anybody talk about it?

Mr. VINCENT. Yes, I guess just the situations that I have been aware of, if you've got a farmer with questionable management, you aren't going to recommend a no-till system to him on a chance that your loan might go bad. In that respect, you would almost have the opposite effect.

Senator JEPSEN. You made an interesting observation in closing here. I would commend you for it. You really pointed out something that really has been touched on separately all afternoon but not put together, and that is—if I recall correctly there are some who can utilize a 50-percent cost share but that leaves a lot of folks standing

in line waiting, whereas the investment tax credit would be a better approach. You are suggesting we have an option, keep one and have the other available, which is an interesting observation. I thank you very much

Mr. VINCENT. One think I wanted to point out to you, I notice you had an article handout on an area around Westchester where we had 12-inch rainfall this spring, and we were right in the middle of that, and the no-till was extremely effective in the 12-inch rainfall.

Senator JEPSEN. You are a witness to that?

Mr. VICENT. Yes, right there.

Senator JEPSEN. Very good. You are a very well-dressed young farmer, I might add.

Mr. VINCENT. My wife said that until she got down to the boots, and then she stopped.

Senator JEPSEN. I like your threads. Let's just take a second here. We got a good problem, and that is, we have a number of people who have asked to be heard, and that's what we are here for, so they will be heard. We have also, though, a time problem. I don't know about the schedule for this room, but if I might make a suggestion, John Latty is the last scheduled witness—is that pronounced right, L-a-t-t-y?

Mr. LATTY. Right.

Senator JEPSEN. Mr. Latty is the last scheduled person to testify. Ed Augustine, is Ed here? Ed is not here. Don Nelson, is here, yes. And Gary Kunde, he's here. Don Kisling, Don Kisling, Don K-i-s-l-i-n-g, he's not here. Mr. Specht. Mr. Specht is here, all right. We will have you testify and I would respectfully ask and hope that, you know, we cannot take over 10 minutes. In fact, I would like to be able to finish this up by 5 o'clock, which is a half hour longer than we planned. I think we can do it all if everybody will help. John Latty, from Burlington, farmer, Rural Route 3. Thank you for coming and sharing with us today.

STATEMENT OF JOHN LATTY, BURLINGTON, IOWA

Mr. LATTY. Thank you, Senator. I won't take much of your time. I'm much better at hauling manure than I am at making speeches, but I am a farmer and landowner here in Des Moines County and here to discuss the problem that we are having with multiflora roses in this part of the State. I don't know whether you are familar with these roses or not, but they were introduced by the Department of Agriculture within the last 20 to 25 years as a natural fence or habitat for wildlife, and they have turned out to spread very rapidly.

They spread by seeds. They have berries on them that have about seven seeds in each berry. They are carried by birds, or any other means. It seems as though the climate around here is very good for them, and the only efficient way to get rid of them that we have found is "Tordon" pellets. That is easy to do. It's very costly and very time consuming, and it works well out in an open pasture, but wherever there is trees it kills the trees also. If you try to kill the rosebushes under the trees, it will kill the tree, which is not very good. There is all schools of thoughts on what to do about them. Some people have the feeling that the Government brought them in

here, let them get rid of them. Others haven't used their pasture for years, and they are never going to use it, they don't do anything. There is others that will go to any expense or any amount of trouble to try to get rid of them. The bulk of the people want rid of them, but they would just like to have them go away. That's all I have to say.

Senator JEPSEN. What is the name of this?

Mr. LATTY. Multiflora rose.

Senator JEPSEN. Multiflora rose.

Mr. LATTY. Right.

Senator JEPSEN. And who brought them in here?

Mr. LATTY. Department of Agriculture.

Senator JEPSEN. For what reason?

Mr. LATTY. Wildlife habitat and natural fence.

Senator JEPSEN. Do they develop into a natural fence?

Mr. LATTY. Not very successfully, no. They make a barrier, but they cover everything, cover the whole pasture, anything that isn't tilled, they spread, road ditches, railroad right-of-ways, whole pastures. If they aren't pastured, they will take it over.

Senator JEPSEN. Are they as hearty as a Canadian thistle?

Mr. LATTY. Yes.

Senator JEPSEN. About the same?

Mr. LATTY. Worse.

Senator JEPSEN. That's bad.

Mr. LATTY. Except they will get much taller. A Canadian thistle will only get 18 inches to 2 feet tall at the most. These will get 15 feet tall.

Senator JEPSEN. OK, do you think soil conservation should be mandatory or voluntary?

Mr. LATTY. I hate anything mandatory, but there are lots of people that will do nothing for them.

Senator JEPSEN. OK, one of these "voluntaries" but. Right?

Mr. LATTY. Exactly.

Senator JEPSEN. Thank you very much, John, for sharing with us.

Mr. LATTY. I have a folder here that I might give you that was put out by the Department of Agriculture in 1949 and 1950 telling the benefits of them. You might be interested in it.

Senator JEPSEN. I would appreciate having it.

Mr. LATTY. It makes it sound very glamorous.

Senator JEPSEN. Don Nelson, farmer.

STATEMENT OF DON NELSON, DANVILLE, IOWA

Mr. NELSON. I appreciate this opportunity to express my convictions and my ideas to you, Senator Jepsen, and your committee concerning conservation as it involves the responsibility of the landowner, the operator, and the desires of our government agencies to help in the conservation of the irreplaceable soil. I'm Don Nelson, Danville, Iowa, farmer, cattleman, operating 6,500 acres, a cattle feedlot supported by 1,000 cowherd, attended Iowa State University, recognized as Iowa's Outstanding Young Farmer and have received recognitions in soil conservation.

I, as a landowner, accept conservation of the soil as a desire and an obligation and, because of this, have built many miles of terraces, have seeded down land to rotational pasture that had before been

intensively row cropped. In the row crop part of the operation I have utilized soil management practices that have been proven, as well as being innovative, in new soil conserving farming techniques. Farmers today are aware of the need of conserving the soil and are also aware of their obligation to making necessary real estate payments. We have conservation and economics to deal with. The urgency of finding ways to conserve our soil has been hastened by our farming techniques of large modern machinery, big fields, and the unprofitability of cattle operations that utilize grass which, in itself, conserves soil.

I expressed I have convictions in regard to soil conservation. No. 1, land that's adapted to intensive row crop farming should be intensively utilized for that purpose. No. 2, land that is rolling and susceptible to erosion should be seeded to grasses and legumes. No. 3, marginal land must be seeded to grasses and legumes or be farmed by no-till farming methods. No. 4, the solution to furthering soil conservation will be the results of our attitude, determination, and working together of farmers with the cooperation of Federal agencies to change our tillage systems. No. 5, the leadership, motivation, monitoring, and direction of further conservation must be handled at county levels by our Soil Conservation Service.

My ideas now in regard to soil stewardship. No. 1, continue to educate landowners, farmers, industry, and others who have occasion to work with the soil to the fact that we need to preserve it because our topsoil is irreplaceable and it takes so long to rebuild what we have remaining. No. 2, continue to fund research concerning techniques in obtaining maximum production under no-till farming methods. No. 3, provide government support to farmers and others who practice new techniques of soil conservation in the form of cash payments or conservation practice credit. No. 4, review and revise our cross-compliance program.

Soil stewardship must be No. 1 prerequisite to participate in any government help program, whether it be a low interest loan on storage facilities, a grain reserve loan, or any cost sharing project. No. 5, appreciate those who are the present innovators, the present conservationists with marginal land already seeded to grasses and not exclude them from government help programs as we encourage other farmers toward soil conservation. We, as food producers, have many opportunities ahead of us if we can conserve our topsoil. Just think of the possibility of increasing national crop production as we learn to row crop rolling land by new farming methods. Did I make my point clear enough?

Senator JEPSEN. Well, you did. You certainly offered what I consider to be a perfect solution. In other words, as was indicated earlier by the soil conservationist.

Mr. NELSON. Howard Bright.

Senator JEPSEN. Who I heard say essentially there is some land, but no matter what you do you are not going to conserve the soil because it's too hilly, and it's going to wash and run no matter what you do. You are saying that the land on which one can't practice soil conservation on a result basis, and obviously you should put in grasses and legumes. That's a perfect solution.

Mr. NELSON. Right. Yes, sir. You recognize the facts, and then you got the solution taken care of automatically. There is so much

soil conservation work that farmers have tried to practice that hasn't honestly been conservation work. They have tried to reclaim timberland and make it farmland, and there is a difference, and a lot of this has been allowed in a cost sharing program, and I'm saying that's wrong. That should be seeded down to grasses and legumes.

Senator JEPSEN. It certainly shouldn't be encouraged, as it has been, and people rewarded for it.

Mr. NELSON. Correct.

Senator JEPSEN. And your point is well taken.

Mr. NELSON. I thought maybe you might ask me about the project at the Army Ammunition Plant. Do you have a minute? I might make a comment or two.

Senator JEPSEN. You certainly may.

Mr. NELSON. I'll make it very short.

Senator JEPSEN. I am interested very much. As a member of the Senate Agriculture Committee and as a member of the Senate Armed Services Committee, I can assure you we should have continued cooperation to do the work on land controlled by the Federal Government.

Mr. NELSON. We appreciate this very much. I want to make sure that you feel welcome at any time. We have been quite fortunate to have other dignitaries from Washington to come and visit, and, most recently, Congressman Leach. He was on the site. In our discussion we summarized the biggest need from our Washington leadership is that we would like to make whatever effort possible to get the eastern Congressmen and Senators acquainted with our problem, recognizing that they cannot all come on the spot to Iowa here to understand what we are doing, but Congressman Leach commented that there is a few of them that has never been in a cornfield, and so part—that is part of our educational program also.

Senator JEPSEN. That's good. I would say this: That in the Senate we want to do this, and my colleagues and I have talked about it, and I'll help promote and bring this about as much as possible. I have talked with them and their staff, and I want them to visit us. Most of the States—surprisingly, we think we are the only ones involved in agriculture and farming. Folks in Virginia and folks in New York are really involved in agriculture and farming as we are. It is different between the Congress and the Senate, because Senators represent an entire State as opposed to a portion of the State. There are many people. Congressman Leach is correct. There are Congressmen who represent 10 square blocks in the center of New York City, and they not only have never been in a cornfield, they think that milk still comes from bottles.

Mr. NELSON. I want to leave you one thought. We will learn to conserve our soil.

Senator JEPSEN. Thank you. Do I pronounce this right? Gary, K-u-n-d-e, Kunde, Rural Route 1, Bellevue. Is that north of Clinton?

STATEMENT OF GARY KUNDE, JACKSON COUNTY SOIL CONSERVATION DISTRICT, BELLEVUE, IOWA

Mr. KUNDE. It's in Jackson County. I would like to thank you for the opportunity to speak on behalf of the Jackson County Soil Conservation District and also on behalf of a young farmer getting started

in farming. In Jackson County we have 172,560 acres of land—the capability classes, 2E, 3E, and 4E. Jackson County has the highest percent of land, in the 9 to 12 percent slope range, being row cropped in the State. All this has potential for serious erosion problems. Each year the district tries to expand their programs, but each year the budgets are either held the same or reduced. Either way we are losing ground. Targeted area concept, generally, we accept.

The subsoils in eastern Iowa are much more fragile than perhaps western Iowa, southeast Iowa where subsoils with extremely high clay content and somewhat poorer fertility, northeast Iowa subsoils are underlined with limestone. Targeted area of western Iowa may have high erosion rates; but if you look at potential damage to the resource base, eastern Iowa soils lose their productivity quicker. The targeted area approach makes a lot of sense in terms of channeling technical assistance in new areas of greatest need, and we would like to include eastern Iowa in those needs for the targeted area.

Much has been said about the cross-compliance between USDA programs. If such a proposal were to be undertaken, Soil Conservation Service would be the logical agency which has a technical ability to handle this program. Given this responsibility, it would take additional staff to carry out the compliance certification while maintaining their existing programs. Part of the problems we see in Jackson County involves displaced farmers from urban areas and also farms being sold because of the high price of land—level land in neighboring counties. Buying land in Jackson County and farming it like it was flatland is a concern of ours. Generally speaking, whenever land is sold, the new owner must put it into row crop in order to cash flow it. Often, this is at the suggestion or requirement of the lending agencies. I might say here also——

Senator JEPSEN. Would you repeat that again, please, the last statement you made?

Mr. KUNDE. Often, this is a suggestion or requirement of lending agencies, in order to cash flow the purchase of a particular piece of property, in most cases, given today's economic situation one must maintain a row crop situation on every acre that is available to row crop in order to generate enough income to cover the debt. I would like to suggest here that perhaps Farmers Home Administration may give some consideration to this. We are working closer with them in Jackson County now than we have in the past, with requiring new loans to have a conservation plan included with that particular farm prior to them accepting a loan.

The conversion of livestock operations, including crop rotation—pasture to row cropping, is accelerating the erosion problems. If the Federal Government is going to use grain as a means to balance the trade deficit overseas, then it had better be ready to invest in protecting the soil which produces the grain. Otherwise, just as surely as the oil supplies in the Mideast will be gone, so will the productivity of our soils, and which will be the more serious problem.

We, in eastern Iowa, are making some progress. We have been working with no-till concept of farming for about 10 years now. No-till enables us to raise more acres of row crops with less machinery, fuel, and still control erosion. It is not easy, and we have taken some lumps trying to make it work. At the present time no-till looks like the fastest way to protect a lot of acres with a relatively small invest-

ment; however, we still don't have all the answers. We need to expand our research programs in the no-till concept, however, we need to go at it not with the idea of how does no-till compare with other systems, but rather take the approach that we must make it work and how can we do it better.

Also, we need to conduct research on higher production and efficiency with the underlying mandate being erosion to be controlled. This may mean expanding our research from flat areas that seem to be around most of our universities to maybe the bordering parts of the States where they do have serious erosion problems from water runoff. I am a member of the Iowa till program in Jackson County. We are one of the counties that did apply and was selected to participate in the Iowa till program. I think that concept went a long ways at getting something other than mold-board plowing done in this 6,000-acre watershed area. It's education that we need, and I think it's a good step in the right direction.

Senator JEPSEN. Thank you, Gary. Do you think that the soil conservation ought to be mandatory or voluntary?

Mr. KUNDE. My question in response would be who's going to decide what is the right move? Is someone from Washington, or are we going to do it at our own level? I haven't seen too many programs that I've been satisfied with coming out of Washington; no offense intended, but by that I mean no mandatory controls.

Senator JEPSEN. OK, and let me make sure I heard what I thought was a very good point you made. We have experimental soil conservation on the academic or university level that be sure we have some real live hills or places where there is real soil conservation problems rather than on the rolling flatland around the university. Did you say that?

Mr. KUNDE. Yes. In fact, I have been working with no-till now for 7 years in my own farming program. I have had various degrees of success up till now. We are runnng about 700 acres of row crop corn and beans on relatively steep ground. We are very satisfied with no-till. It's improved our productivity of our ground to the point that I don't feel there is a question whether no-till will work. I am convinced, and I think, based on the statements here today, we are convinced that no-till will work, and, again, give credit to the persons that are saving the soil, not those that are depleting it.

Senator JEPSEN. Thank you very much, Gary.

Mr. Specht, S-p-e-c-h-t, and what is your first name, sir?

STATEMENT OF MAX SPECHT, COUNTY SOIL COMMISSIONER, MONTICELLO, IOWA

Mr. SPECHT. Max, M-a-x. Thank you very much for letting me in at the very end. I'm a county soil commissioner. I have been one for 10 years. I'm also included on the 208, the so-called Clean Water Act, on the State advisory committee. I would just quick make a couple comments. I almost cringe every time I sign a voucher for cost-sharing that goes for terracing. I don't want to outlaw terracing because I know there is a place for it, but we are protecting so few acres with the amount of money that we are spending. I'm only interested and involved in State cost-share, but I know that some

of the fellows that are on the ASCS committees on the county, have the same feeling as I do, and I am from an area where we almost 100 percent, are on a no-till program—not a no-till, a minimum-till program.

Senator JEPSEN. What's your hometown?

Mr. SPECHT. I'm from Monticello, Jones County. I'm a neighbor of Dan Stadtmueller, who has testified here, and what Dan has said has been absolutely true; and he is a real leader, and I like to think that I'm a follower and a partial leader too; and I think we have to commit some of our funds to promoting minimum-tillage. It's the only way we can solve the problem in the next 5 or 10 or 20 years or 40. We just don't have the time to go the permanent practice route. I see some neighborhoods that just dumbfound me.

All the State and Federal money couldn't fund enough money to put it in permanent practices, but I feel that some way or other we have a chance with minimum-tillage program, and it's real satisfying to see some of this cost-share money that went in this watershed program, you know, on a State basis and see some of the fellas that have taken hold and another following year have more followers, and this peer pressure thing is the thing that's going to win the battle in my book. Thank you very much. I'm not going to say any more. I feel very strongly about this minimum-tillage thing.

Senator JEPSEN. And how do you feel about voluntary versus mandatory soil conservation?

Mr. SPECHT. I absolutely think it's got to be done on a voluntary basis, and I would say in our area—I am familiar with an area of, oh, 15 miles between a couple of towns. There is hardly a dollar of any kind of cost-share money having been spent there, and so I just feel we have to go about this voluntarily.

Senator JEPSEN. You kind of answered it when you talked about your strong feeling about peer pressure. That's voluntary, but it's a better way.

Mr. SPECHT. Let me tell you something. I've had fellows come to me and apologize for plowing. Now, I know that a lot of places they apologize for going to no-till or minimum-till route. This is what can happen if we go about it right.

Senator JEPSEN. I agree, Max. Thank you very much. Is there anyone else that desires to testify?

STATEMENT OF JOE BECKMAN, SPERRY, IOWA

Mr. BECKMAN. Senator, my name is Joe Beckman, and I farm up by Sperry. Rural Route 1, Sperry, is our address. Recently, back in 1979, I bought 242 acres of rough ground from my father, and economic conditions presently are making it very difficult for a young farmer like myself, who tries to conserve the soil, to make it justify. I operate a cowherd on this rough ground, and I farm 300 acres of flat ground as well. Under present economic conditions it looks like we are going to have to sell the cows and plant corn. It's very difficult to maintain ground that should stay in grass. Under the present economic conditions of 15 percent and higher interest, it's become necessary to plant corn in order to justify cash flow in order to stay in farming as a young farmer, and I think it's just kind of sad. I mean, we are getting to the

point now where you are either going to make it or you're not, and the bankers are going to say you either got the money or you shut the tractors off and line them up, and I would just like to see some help.

What I would think would help is to get away from a cheap food policy, and importing beef, and things like this. I think rather than taxing people at the grocery counters, and things like this, get food up to where it's economically feasible to produce it and to have an income so that you can reinvest it in your farm, and that's just about all I have to say.

Senator JEPSEN. Thank you very much, Mr. Beckman. High-interest rates, inflation, and cost of production is hurting everybody. As we said earlier today, we used to live with $3 corn. In fact, we used to dream about it, and we did very well with $50 hogs, $60 cattle until the cost of production became $2.85 a bushel, and so on. That cost of production, inflation, the same thing that is hurting farmers is hurting everybody in this country. That's why we are trying to bring about change. We have arrived at that point after a number of years. Anyone else? I hereby then declare this soil conservation hearing adjourned, and thank you all for all of your participation.

[Whereupon, at 5:07 p.m., the subcommittee adjourned, subject to call of the Chair.]

APPENDIX

[The following papers were submitted by Roger Rowe, Illinois Association of Soil and Water Conservation Districts, see p. 30 for Mr. Rowe's oral presentation.]

Resource Agenda for the 80's

A statement of long term policy by the Association of Illinois Soil and Water Conservation Districts

The need

As we enter the decade of the 1980's, it is essential that we develop strong, public supported natural resource conservation programs in Illinois. Not since the organization of the Soil and Water Conservation Districts have people been so concerned about Soil Erosion, Sedimentation, and Water Quality. Agricultural technology, economics, and demand for feed grains and oil seed crops have pushed farmers into using the land more and more intensively. Many landusers have not correspondingly increased conservation management. Soil erosion on some of the state's crop lands has increased at an alarming rate, reducing potential productivity and degrading water quality. Flood damages exceed 150 million dollars annually. Thousands of acres of prime farmland have been converted to other uses. Small upland wildlife population (pheasant, rabbit, quail) have reduced at an alarming rate, partly due to the destruction of natural habitat, removal of fence rows, land clearing, and by changing to more intensive crop rotations.

Concern for environmental quality dominated in Illinois during the 1970's. General agreement that the environment was being degraded by human activities brought new laws and regulations, followed by much litigation. New agencies were formed and existing agencies reexamined their programs and placed greater emphasis on the environment. A decade of environmental publicity and three years of Section 208 (PL–500) Water Quality planning has increased public awareness of the need to consider environmental impact of most private and public actions, has produced improvements in air and water quality.

The Association of Illinois Soil and Water Conservation Districts, AISWCD, believes the major thrust of the 80's should be implementation—getting things done. The shift from planning to action requires new attention to how we can better organize ourselves to accomplish the task. The technical answers are not all known, and much available technical know-how is not being adequately applied.

Illinois consistently ranks among the leading states of the nation as a producer of agricultural products. A well-balanced combination of agriculture, manufacturing, service industries, business and transportation provides Illinois with a strong stable economy that is integrated into the national economy.

Although the Illinois population of 11 million is predominately urban, 80 percent of the 36 million acres of the state's land is in farms.

The deep, dark-colored, relatively level prairie soils account for 60 percent of the state's cropland and are among the most productive found anywhere in the world. Approximately 80 percent or 19 million acres of the state's cropland is classed as prime farmland using the USDA prime farmland definition.

Soil erosion exceeds the soil loss tolerance on about 50 percent or 12 million acres of the state's cropland. This problem has occurred in part because of the demand for feed grain and oil seed crops. The Illinois row crop acreage has increased from 13 million acres in 1945 to 20 million acres in 1979. Soybeans have largely replaced small grain and forage crops in the rotation.

Very low beef prices in the mid 1970's forced many farmers to sell their cow herds. They started growing row crops on the rolling land that had been used for pasture.

AREAS OF MAJOR EMPHASIS IN THE 1980'S

1. Public relations and motivation

Due to economics, apathy and lack of understanding, many Illinois landusers have not applied adequate soil erosion control measures to provide needed protection for sustained food and fiber production. The Association of Illinois Soil and Water Conservation Districts will promote programs to encourage adoption of soil conservation and related environmental measures by landusers. In addition, the Association shall promote understanding of the soil erosion and related environmental problems by the general public, to gain their support in installing measures for soil erosion control and water quality improvement.

2. State program

State policies on resource conservation must be refined, and a unified coordinated State Program for natural resource conservation developed and implemented. At the present time state resource conservation policies are found in many acts and documents. In order for the efforts of all cooperating agencies and groups to be effective, these need to be joined in a concise, unified, State Program. Such a Program should define the present natural resource situation in Illinois, state broad objectives, and define the actions, including economic and technical considerations, to be carried out by local, state and federal agencies to meet the objectives.

The program should address at least the following areas as they affect both rural and urban conservation activities: Erosion and sediment control; prime farmland preservation and land use; nonpoint water pollution; fish and wildlife habitat; mined land reclamation; education, information, promotion; research; soil survey; energy; and urban concerns.

AISWCD will serve as a catalyst to bring about the development and implementation of such a program.

3. Education

Through effective environmental education programs, every citizen—both student and adult—should have opportunity for classroom and informal study to acquire knowledge, values, attitudes, and commitments needed to protect and improve the environment. A clear understanding of the economic, social, political, and ecological interdependence between urban and rural areas is needed. The AISWCD shall work toward programs which make certain that environmental education essentials are provided, that there is coordination of effort and reduction of duplication, and that public and private organizations provide needed support.

4. Research—technical, social, economic, and environmental

Changes in society, including changes in agriculture, have raised questions that need answers based on current research. The Association shall encourage adequate research to provide answers to our most pressing soil erosion and related environmental problems.

5. New approach

The AISWCD will be a catalyst in the development of new and innovative approaches to reduce soil erosion, increase conservation practice application and improve water quality. Financial support is needed for technical and cost-sharing assistance to encourage the application of soil erosion control and water quality improvement measures.

6. Funding of districts

Current state goals are to reduce soil losses throughout the state to tolerable limits by 2000. This will require at least a doubling of the technical assistance that is now available along with new and increased cost-sharing for practice application. Soil and Water Conservation District financial support must be strengthened to provide districts with full time clerical services, educational and environmental coordinators, administrative aides, technical help to supplement that available from the Soil Conservation Service and the ability to meet new and increasing demands for services. The AISWCD will initiate and strongly support a campaign for funding adequate District Programs.

President's Report

A report called the "Global 2000" was submitted to President Carter by the State Department and the Council of Environmental Quality.

It reads like something out of "The Empire Strikes Back." The time: the year 2000. The place: earth, a desolate planet, slowly dying of its own accumulating follies. Half of the forests are gone; sand dunes spread where fertile farmlands once lay. Nearly two million species of plants, birds, insects, and animals have vanished. Yet, man is propagating so fast that his cities have grown as large as his nation's of a century before.

Shortly after being elected president of your State Association, I read this article in the August 4 issue of Newsweek. It brought new meaning to me as a soil and water conservation district director. The report brings to light the pressures that will come to bear on our farmland here in Illionis by the year 2000—twenty short years away. We know that we have problems with erosion and water quality; we know we are losing prime farmland at an ever increasing rate because it is convenient to build on; also, because we are not good stewards of the soil, we are not thinking ahead.

With this report we know that the world population will increase 55 percent to 6.35 billion people in two decades; nearly all the growth will come in the underdeveloped countries. The increased demand for food threatens to engulf the output of available land. The study shows that in the early 1970's, 2.4 acres fed 2.6 people; by the year 2000, they will have to feed four; almost asking double of land that is eroding away at 150 million tons of productive topsoil a year in Illinois. And, almost asking double of prime farmland that is disappearing at the rate of 100,000 acres a year in Illinois. These pressures will be felt sooner than we think. People today feel that grocery shopping is a necessity; by the year 2000, it may very well be an unaffordable and unattainable luxury!

Why do I start a new decade, a new presidency, and a newsletter with such bleak news?

The "Global 2000" report brings out all the things district directors have been concerned about on a local basis and it shows dramatically how big and how important a district is and will be in the future.

Stop to think: to my knowledge there is no other locally elected officials in the whole United States who have the responsibility that we do. Soil and water conservation, prime farmland preservation, and awareness of energy conservation are our domain.

Granted, there are federal groups such as ASCS, SCS, or EPA, but they are not locally elected, and controlled. Boards such as yours—a very elite board, one whose job is going to be ever demanding: you will be asked to give more time, more help, more responsibility, more professionalism, and more leadership. You will not be able to rely on just the District Conservationist or your Administrative Aide, you will have to rely on yourselves as directors; your judgement, your experience, and your common sense. You will be asked to act, not react in the future as a soil and water conservation district director. You are and will be continually asked to lead the preservation of our country's greatest natural resources in the decades to come. By banding together as a State Association you have allowed your voices to be heard as one. You have shown leadership in the need for preservation of our natural rescurces ahead of the bleak reports of today. You are today proposing new ideas to stop erosion to clear up water and to increase the productivity of Illinois farmland.

Your State Association has a prime farmland committee headed by Don Manecke who will collect your thoughts and will keep you informed and advised.

Your State Association has an urban department headed by Eldora Zimmerman. We recognize the tremendous dependence the rural and urban population have on one another. She will keep you informed and advised.

Your State Association has a district outlook department headed by Eugene Dormire. They are now looking at things like leadership and training in the future.

Also, they have a personnel committee headed by Wilbur Bowman. We care about our employees. This committee is the only one of its kind in NACD.

Your State Association has an education department headed by Don Condit. They are looking at ways to achieve more professional soil and water conservation education in Illinios.

Stop to think in just one more generation how few people will have roots on the farm. It's a scary thing to think that the vast majority of people in the United States will have roots from concrete and blacktop. What will they know about soil and water? Don's department is tackling this. With your help and support, they will get the job done.

Your State Association has a resource department headed by Gary Johnson. They have a water resource committee, forestry and RC&D committee, and a research committee. There is a tremendous need for research—not just technical, but social, economic, and environmental as well.

Your State Association has a legislative department headed by George Deverman. They will serve as a conduit for your ideas and keep you informed USE THEM.

Your State Association has a public relation department headed by Floyd Bolen. You can see already the results of Floyd's department: an Association newsletter, in cooperation with the Division of Natural Resources. Congratulations, Floyd, and thanks, DNR.

My goal for the year is to carry out the concerns brought out in the Association's Resources Agenda for the 80's; to support the Association Management team promoting a greater understanding of the importance of being an active district director is also a goal. The job is too big for one man on a Board. It will take all 490 directors working in the state to meet the demand of the 80's and the needs of the generations to come.

If you don't do it, who will?

STATEMENT OF OLIVE SULLIVAN, PAST CHAIRPERSON, GEODE WONDERLAND R.C. & D., BURLINGTON, IOWA

Thank you, Senator Jepsen, for giving us this opportunity to state our views on the vital issue of land conservation—certainly a priority issue for those of us living on this good Earth today and for generations yet unborn. There is no uncertainty as to the land available for our use in the state of Iowa. Only so much is available for our many uses, whether it be for growing crops, building homes and industrial sites, new freeways, shopping centers or whatever. The uncertainty is how well we will preserve our land for continuing use as a prime commodity to help feed the world for many generations to come. We must face up to our responsibility to use our soil well, including planning for the future, conservation practices and weighted decisions for the best use of acres available.

I have worked with the Geode Wonderland R.C. & D. (Resource Conservation and Development Area) since its beginning back in the early '70s. I am past chairperson of the four-county area as well as the Des Moines county group. For nearly 10 years I have worked with the League of Women Voters as land use chairperson of the local group. I am presently chairperson of the Des Moines County Conservation Board and the County Zoning Commission. I believe that such grassroots level groups as these have had a huge impact on soil conservation awareness in Southeast Iowa. I am proud to be a part of these people oriented groups, studying and working to maintain a better environment today and to help educate others on the needs for better land conservation.

Iowa is fortunate to hold a large percentage of prime food-producing soil of the world. However, without added soil conservation methods, our land will continue to erode and wash away because of careless or exploitive treatment or natural causes. The R.C. & D. organization has been a most effective rural development program throughout the country. Emphasis through R.C. & D. projects is on local control with ties to protect and develop natural resources into human needs of a community. Not only do such projects help the people use their natural resources wisely, they also help improve a community's economy.

One of our biggest thrusts in the Geode area has been to help educate the people on the benefits of conservation methods of farming, particularly the no till practice. This thrust has helped expand the acres of no till in croplands in these Southeast Iowa counties and has also reached out to federally owned land. Private land owners are beginning to face up to their responsibility of caring for the land but often must be shown that conservation methods will mean a dollar saving to them. All levels of government must share the responsibility for land management, taking a leadership role with policies, standards, laws and incentives to land owners to better conserve the soil. Land use bills have been introduced and thrown around by our legislators for many years. Still we have no serious land use policy. Soil conservation has been introduced and is happening in some states better than others or on some farm sites more than others. But the total

job is not being accomplished. More appropriations are necessary to help the farmer and other landowners practice conservation methods. A survey shows that Southeast Iowa will lose the top soil on about one-third of its cropland in the next 20 to 50 years, if more steps to conserve the soil are not taken. Should this happen, the world would lose a tremendous resource for feeding its people.

Reagan budget cuts have indicated a drastic reduction in soil conservation monies, a cut of seven million dollars in R.C. & D. funds alone! This is of vital concern when these dollars should be considered the answer for tomorrow's foundation for living in these richly blessed United States. The land must be saved for other farmers and other landowners to have the chance of growing crops and continuing life on a future day . . . this priority must take precedence over MX missiles and billions of dollars worth of military weapons!

BURLINGTON, IOWA, *August 24, 1981.*

Senator ROGER W. JEPSEN, *Davenport, Iowa.*

DEAR SIR: As a farmer and your supporter I wish to acquaint you with the multiflora rose (noxious weed) problem we are facing on our pasture and timberland. On my 750 acres these nuisance rose clumps persist in showing up everywhere except on cultivated land.

I did not plant these roses and have been fighting them for at least twenty years. The way they were introduced to our neighborhood (and the state) was by plantings that were recommended and subsidized by the U.S.D.A. Soil Conservation Service and Extension Service. They advertised to farmers that multiflora roses would create a "living fence" and were beneficial to wildlife. Government agencies such as conservation areas and the Iowa Ordinance Plant are infested with multiflora roses. Until two years ago these roses were still available in wildlife packet plantings. Multiflora can grow in clumps as big and high as a house room and will climb trees. It has thorns like fish hooks that will grab and the long runners wrap around you.

The flowers turn into seeds just like any rose and in winter, birds eat rose seeds because they are above the snow etc., and are readily available. The seeds are hard enough not to be digested by birds (the seed covering is their food) and are dropped wherever the bird flies or lights. No livestock goes near these roses and the grass and pasture does not grow under them. Multiflora rose is multiplying so fast now that it could be said to be out of control because most landowners and operators do not try to eliminate it as there is much added work and expense to kill it. Chemicals are expensive today and there are few that can even be effective on roses. We use "Tordon," a pelleted soil sterilizer, but it also kills trees and grasses etc. so should not be used in timber or as a complete coverage. Each year we mow where we can and use herbicide but each year there are more roses showing up. If we did nothing to try to control roses, within two or three years livestock or people could not pass thru areas of the pastures and timbers as there would be a living barrier of roses.

I believe any farmer around here would like to see these roses eradicated and at least controlled. All over our area everybody knows a mistake was made by transplanting them from the Southern States.

It is not my place to say what should be done about the problem as I realize this is just one more of the troubles such as soil erosion etc. that exist today, not to mention farm related problems. However, these roses can be controlled and possibly eradicated and a start is long overdue. We taxpayers are paying the salaries of many smart and educated people who can certainly come up with a program and means to solve this problem.

John Latty, a land owner and farm operator and neighbor of mine, will speak on this subject at your public meeting in Burlington on August 31st. He can fill you in on any details about this problem as he is fighting roses too.

Thank you for your consideration.

Truly,

PIERCE W. GIFFIN.

STATEMENT OF GERALD MAYNE, CHAIRMAN, UNION COUNTY SOIL DISTRICT COMMISSIONERS

Our two watersheds are our largest projects. The first is a twelve-mile watershed consisting 50,000 acres for the purpose of flood control and water supply. The large structure will be 650 acres in size and will be used for Creston's water supply,

as well as for flood control. The land for this structure has been purchased and fenced by Creston. An engineering company has been hired to design the structure and, hopefully, dirt will start moving in the fall of 1982. There are to be 11 small grade stabilization structures in this water shed. Nine are finished. We have easements on 10 of the 22 small flood control structures to be built. The local A.S.C.S. office allocated $30,000 in special cost share funds to be used above the large impoundment in 1980 with Creston and the county adding to this. During 1981, these agencies have added another $50,000 to the area. This has been at a 75–25 percent cost share. We hope federal money will continue to be made available for this project now that it has proceeded to this point.

Our other watershed, Three-Mile Creek, contains 37,320 acres. The plan contains two large structures of 170 acres and 540 acres, respectively, and 31 small grade stabilization structures. The 31 small grade stabilization structures are finished. However, the watershed is at a standstill now until the Iowa Conservation Commission purchases land for one or both of the large structures. Besides providing flood control and recreation, the large structure would provide a water supply for the town of Afton.

We are involved in the Green Valley Clean Lake Project, located just north of Creston. This is a land treatment program to increase the life of the lake and make for better recreation use. The landowners can receive a 75–25 percent cost share. 50 percent of the cost share money is being provided from federal funds through the Environmental Protection Agency. This is the first project of its kind in the nation. There has been a good response.

We are also very much interested in the continuing of the R.C. & D. Program, as we have made use of it on four projects:

(1) The Southwestern Community College's 420-acre farm has been completely treated with terraces and permanent seeding.

(2) One flood control impoundment was constructed above the city of Creston in 1977.

(3) We hope to begin channel work through Creston in 1982.

(4) A seven-acre impoundment with an 11-acre duck marsh was constructed last spring at the Talmage Hill Wildlife Area.

Our steep slopes and hills are one of our greatest concerns. They should stay in grass except for one year out of every eight or ten for reseeding programs. Most present conservation incentives are for land in feed grain crops. Once land is planted to row crops, it doesn't seem ever to go back to grass. Our present A.S.C.S. one-time $10 per acre no-till payment, which is excellent on crop lands, shouldn't be used on grass land. Maybe instead of paying $10 for no-till, $10 should be paid for fertilizer to improve the grass.

One idea that originated and was discussed in our county concerned using the county property tax as a basis for a grass incentive program. As a quick example, let us say the taxes are at $10 per acre. Let's make the incentive payment twice the tax, or $20. The A.S.C.S. office could use their certified acreage report for determining the acres of grassland on a farm and make the payment. This idea would be very equitable to everyone, as the payment would be directly related to the taxes paid on the land, and taxes are based on the land's valuation. Grass is a great conservation tool. Unfortunately, it is not used enough. These grass acres also help reduce and hold in check our feed grain supplies. A payment of this kind would make those cow herds look better.

Last year our county received $50,000 in state cost share monies at the SCS office. This, used on a 50–50 percent cost share basis, covered about 40 percent of our applications for cost share assistance. The A.S.C.S. office had about $58,000 for a 50–50 percent cost share. This covered about 25 percent of their applications. Of the applications turned down in the two offices, I doubt if 5 percent of the work was done on their own. They just wait and refile the next year.

We are much in favor of Senate file 569. The 10 percent investment tax credit will bring more money into conservation work, especially from absentee landowners. But with interest rates what they are and the markets as unkind to us as they have been, soil conservation work just won't get done without cost share assistance. We need funds!

Statement of Jerry Peckham, Adams Soil Conservation District

I'm Jerry Peckham, a District Commissioner and speaking on behalf of the Adams Soil Conservation District. I would like to thank you, Senator Jepsen, for coming to Corning and giving us this opportunity to discuss soil conservation with you.

The Adams Soil Conservation District was organized in 1943 and since that time we have been very active in getting soil conservation on the land. We have installed 1,100 miles of terraces, 660 ponds and grade stabilization structures, and have adequately treated 64,000 acres of cropland. In the last two years, we have been actively promoting no-till farming. This year we have had 30 farmers use no-till farming on approximately 3,000 acres.

We have accomplished this work by using all of the various programs that are available to us. Most of the terraces and structures that have been installed were through either the state or federal cost share programs.

We have used the Watershed Protection and Flood Prevention Act (Public Law 566) to increase the amount of conservation on the land. We completed both the West Douglas and Walter's Creek Watersheds through this program and we have six more watersheds at various stages and waiting for the necessary approvals.

The Walter's Creek Watershed included 31,560 acres in Adams County. Through the watershed program, we constructed 37 grade stabilization structures similar to the one shown here. Also, included in the watershed plan was a multi-purpose structure, shown here, known locally as Lake Icaria, which has 700 acres of surface water.

Lake Icaria has given Adams County many benefits beyond soil erosion control and flood control. It serves as a major recreation area for Southwest Iowa. (picture) It serves as an additional water supply for Corning. The water supply has resulted in Corning being more attractive to prospective industries. We have a new industry moving to town this year and a dependable water supply is one item that helped sell Corning as a site. In 1974, the City of Corning had a severe water shortage, this was prior to the completion of Lake Icaria, which resulted in a hardship in the community. But with a water source as large as Lake Icaria, this problem has been solved.

The Adams Soil Conservation District is a member of the seven county Southern Iowa Resource Conservation and Development Project. We have used R.C. & D. funds to get more conservation on the land. We are installing terraces and structures above Lake Binder to reduce the siltation into the town reservior. We are also building grade stabilization structures in a small watershed to the north and west of Corning. These structures will stabilize some gullies and help control the flow of water through Corning.

R.C. & D. funds have resulted in accelerating the rate of getting soil conservation on the land. We estimate that we have gotten four to five years of work on the land that wouldn't have been accomplished otherwise.

As I said before, the Adams District has a lot of accomplishments in the past 38 years. But we only have 43 percent of the needed terraces, 32 percent of the needed ponds and structures, 31 percent of the cropland adequately treated, and only 2 percent of the land being farmed with no-till.

To accomplish the work that needs to be done, the Adams Soil Conservation District needs more assistance. We appreciate the work you did to propose and get approved the Target Area Concept. We are suing the additional personnel to expand the District's involvement in promotion and providing technical assistance to farmers using no-till. But the Target Area Program will not produce many overnight changes. Because with no increase in cost share funds, in fact it appears that both state and federal cost share funds will be lower this year, we are promoting management practices. It takes a long time to convert a farmer from a conventional farming system to no-till or to put some cropland back into pasture.

Besides the additional personnel, we need more cost share funds to meet the demand for structural measures such as terraces and structures. Just to fill the requests of landowners signed up for terraces in the District office, we would need over $300,000 of cost share funds at this time. And there are many more landowners that would sign up if they knew there was a chance for funds.

I know that last winter, you introduced to the Senate the Soil and Water Conservation Incentives Act.

The Adams District Commissioners feel that new programs such as this, in addition to the existing programs, are necessary to get conservation practices on land at an acceptable rate. We feel that the 10 percent investment tax credit on the money that landowner would invest in soil conservation practices would be very beneficial and, we believe, result in an accelerated rate of getting soil conservation on the land.

Thank you, Senator Jepsen, for giving the Adams Soil Conservation District an opportunity to discuss our soil conservation program and needs with you.

STATEMENT OF FRANK DAVIS, FORMER CHAIRMAN, ADAMS COUNTY RESOURCE CONSERVATION AND DEVELOPMENT STEERING COMMITTEE

I'm Frank Davis, former District Commissioner, former Chairman of the Adams County R.C. & D. Steering Committee, and former Chairman of the Southern Iowa R.C. & D. Council. Thank you for giving me this opportunity to discuss the Resource Conservation & Development Program to get soil conservation on the land in Adams County and also to improve the quality of life in Adams County. I feel this program has allowed the commissioners to get soil conservation on the land at a faster rate.

One project measure that has gotten quite a lot of soil conservation on the land is the Critical Area Treatmeant measure above Lake Binder. Lake Binder is a 70 acre lake that serves as a primary water source for Corning. More than 8,700 tons of soil were being deposited annually in the lake. It is estimated that installing the needed grade stabilization structures and terraces will reduce the annual sedimentation by 50 percent and extend the useful life of the lake approximately 65 years. To date, 14 structures have been built and 28,250 feet of terraces constructed. There is still a need for three or four more structures and 35,000 to 40,000 feet of terraces. At this time, we are waiting for the necessary funding to complete the project.

Another project measure that is currently under construction is the Corning Critical Area Treatment project. In this project, we are providing cost share through R.C. & D. to landowners to construct small grade stabilization structures as Jerry showed earlier in his slides. These structures will stabilize gullies and help control the flow of water through a creek in the western part of Corning. At the present time, six structures are completed and four more are funded and will be constructed yet this year. But we have at least five or six more potential structure sites that will not be able to be constructed until we receive additional funding.

Another structure that was funded through the R.C. & D. program was the Prescott flood control project. The City of Prescott had a severe problem with flooding of their houses and business district, they normally had flooding once or twice a year, and as many as seven times a year. The Adams Soil Conservation District and the City of Prescott worked through the Southern Iowa R.C. & D. to build a large structure that controls the flow of water and eliminates the flooding hazard in Prescott.

Working through the Southern Iowa R.C. & D., funding was secured to build a grade stabilization structure on land owned by Rosary Hospital. There had always been a problem with stabilizing a gully that was causing problems with our road to the airport here in Corning. By using R.C. & D. funds, a grade stabilization structure was built that controls the gully and stabilizes the road.

Several of the communities in Adams County have worked through the Southern Iowa R.C. & D. to improve themselves. While R.C. & D. didn't provide any funding, we gave technical assistance so that needed funding could be secured for the Prescott sewer and water project, Nodaway sewer and water project, the Corning Industrial Site (where another new industry will be locating yet this year), and this Corning Community Center where we are meeting this evening. Rural Water was also organized through R.C. & D.

As I've said the Resource Conservation and Development Project has been very effective in getting soil conservation on the land as well as improving the quality of life of the residents of Adams County and the entire seven county area.

The only thing limiting us in R.C. & D. is the lack of funds. We could use $1,000,000.00 for construction of conservation practices in the Southern Iowa R.C. & D. area in 1982. We have many more projects we could implement to get soil conservation on the land if we had the necessary funds. One of the projects would be to work with the county government to replace bridges in need of repair with grade stabilization structures.

Thank you, Senator Jepsen, for giving me the opportunity to discuss the needs of the Southern Iowa Resource Conservation and Development Program with you.

STATEMENT OF BOB CERVEN, CHAIRMAN, BOARD OF DIRECTORS, HACKLEBARNEY WATERSHED

I am Bob Cerven, Chairman of the Board of Directors for the Hacklebarney Watershed that includes parts of both Adams and Montgomery Counties. I would like to thank you, Senator Jepsen, for giving me this opportunity to discuss the conservation needs and some possible solutions for this area.

As Jerry Peckham earlier indicated in his testimony, the Watershed Protection and Flood Prevention Act, Public Law 566, has been very effective in getting soil conservation on the land. The Hacklebarney Watershed Draft Plan, if approved, will provide us again with the opportunity to get more soil conservation on the land.

The Hacklebarney Watershed is a new concept in watersheds. Previous watersheds have included large formal contracts and quite often large structures. But the Hacklebarney Watershed will involve many miles of terraces and many small structures where the landowners will do their own contracting on a cost-share basis.

This draft plan, if approved, will NOT conflict with any of the existing cost-share programs, but instead, will supplement these programs in getting the needed conservation on the land.

The installation of the watershed plan measures will control 100 percent of the excessive sheet and rill erosion and 78 percent of the gully erosion by the end of the 15 year installation period. Under the ongoing land treatment program, it will take approximately 166 years to accomplish this.

The adoption of the Hacklebarney Watershed Draft Plan is important to protect and preserve our land resource in Adams and Montgomery Counties.

I am giving you a copy of the draft plan so that you can review and study it. If you have any questions or comments, I would ask that you contact either the Adams or Montgomery Soil Conservation Districts.

At the present time, the draft plan is going through interagency review. We expect it to be sent to Washington in the late fall or early winter. The Adams and Montgomery Soil Conservation Districts, as well as the landowners in the Hacklebarney Watershed, would like you to give your support and endorsement so that this plan can receive the necessary approvals at the Washington level. Thank you for your time.

STATEMENT OF CHARLES D. CUMMINS, OWNER, CUMMINS CONST. CO., FONTANELLE, IOWA

Welcome to southwest Iowa, Senator Jepsen, and thank you for the opportunity to bring to your attention some of the problems we in southwest Iowa face concerning soil conservation.

The greatest problem I as a contractor face is that of having a continuing work load. Because of the seasons we are faced with a very heavy work schedule in spring 4–6 weeks and in fall 4–6 weeks. Our limited conservation funds are generally used in these times, thus leaving the most desirable time of summer with little or nothing to do.

Therefore I feel we should provide an incentive program, properly funded to better utilize this precious time. This program would provide many benefits some of which are:

(1) Allows ample time for planning and staking and actual construction;
(2) Provides year around work for the expensive equipment required to accomplish the gigantic task yet before us;
(3) Divides the time of SCS, contractor, and farmer.

Heretofore summer incentives have mainly been provided by contractors, using lower prices or extended credit as a vehicle to keep men and machines going. If such an incentive were to be provided through our State or Federal programs, I feel a great deal more conservation could be accomplished at much more rational pace, thus taking a load from shoulders of contractors.

The question immediately arises, how do we fund another type program when our conservation funds are woefully short as it is?

1. We could fund our present program with larger amounts, a proposal which would be met with many raised eyebrows considering the present mood of government, but certainly one must consider under the present soil loss condition.

2. We could as land improvement contractors of America have proposed, and I wholeheartedly support, provide land owners doing conservation with a tax credit similar to those used on purchases of equipment and other similar-type purchases.

At the outset of the tax credit procedure it was, and still is an incentive to stimulate business. What could be a better goal than that of conserving our land resources for those who will need these resources even more than we now need them. I feel this type of tax credit would solve many of the problems we now face as farmers, contractors, and SCS personnel, with regard to maintaining a steady flow of work.

1. It allows the farmer to construct when he is financially ready rather than when he is approved by either State or Federal funding.
2. I feel it would provide the impetus for more summer time conservation work.
3. It would reduce cost of administering the funds through the ASCS.
4. And it would eliminate that age old question: Will I be approved in time to construct this season?

So much for the incentive and funding—I would like to remark about contractor-SCS relations. Over the years I have been engaged in soil conservation, I have sometimes felt helpless when I encountered a specification or situation that did not fit our conditions. Perhaps a specification that looks good on paper but economically just doesn't cut it; or one I don't feel treats our farmers and farms equitably.

I would suggest a panel of soil conservation contractors be chosen from L.I.C.A. Assn. since it best represents a cross-section of those people who actually do the soil conservation work, to discuss and have some input into changes and construction procedures that affect present and new construction cost and their application. It may not be only specifications—it may be a question of eligibility for payment, or any other soil conservation related problem. I do not suggest that this panel would have power to set policy or affect wholesale changes, I see it as an opportunity to inform those policy and specification makers of the construction problems and construction costs. Yes, we do have SCS-contractor meetings on the local level but all too often they address local problems and conditions.

At a recent local meeting I brought forth the question about compensatory time for SCS personnel, and was informed it was no longer used. I would like to see this program reinstated to accommodate the extremely busy cycles SCS encounters in their work year.

We must be always aware of new and changing technology whereby we can affect soil conservation methods and their costs.

Because these costs ultimately determine the amount of acres we place under control, we must strive to find more cost efficient methods using every resource available to us in farming, SCS, and the construction industry.

Senator Jepsen, I wish I could be of more assistance to you in expediting soil conservation and solving the funding problems. For I know farmers in general are not apathetic to this problem that robs them of precious top soil and fertility, nor are the soil conservation service, for they have kept a constant vigil on our land resources. So in the final analysis, you in government control the destiny of our efforts to continue and expand soil conservation in Iowa and in the Nation.

My plea to you then Senator Jepsen, is to implement a tax credit for farmers doing approved soil conservation practices. Support our current ACP program at current levels or even in excess of what they now are, and have faith that the dedicated people in farming, SCS, and construction will implement your programs to the best possible benefits.

RESOLUTIONS—IOWA FARM BUREAU FEDERATION FOR 1981, ADOPTED 62D STATE ANNUAL CONVENTION, DECEMBER 11, 1980

Speculative positions on commodity futures contracts by elevator operators and grain dealers should be limited. This should include both private and company positions.

All major creditors of elevators or elevator operators and grain dealers should be provided with copies of all commodities futures contracts and positions.

NATURAL RESOURCES

Soil conservation

Much progress has been made by Iowa farmers in establishing permanent conservation measures and in adopting conservation tillage practices. However, erosion is depleting our productive soil resources to the extent that soil conservation should be given a high priority by landowners and state and federal governments. A recent survey conducted by the Soil Conservation Service indicates that reducing soil loss to allowable limits in Iowa would require a greatly expanded conservation program over a period of several years.

If an accelerated soil conservation program is to be given high priority, we believe information and educational programs to heighten public awareness of the need for soil conservation should be expanded.

Farmers have matched all state and federal cost-sharing funds in recent years and there is a waiting list in many districts of farmers with conservation plans completed and ready to be implemented.

We urge that cost-sharing funds be increased to meet the growing needs already expressed by farmers.

We believe that long-range results will generally be better with a voluntary approach supplemented by incentives rather than by mandatory directives.

We encourage farmers to make soil conservation a continuing part of their farm operation, and to carry out their conservation plan even though low cost loans, tax incentives and cost-sharing funds are not available. We urge that research efforts be expanded to develop best management practices for various soil types, topographic features and weather conditions throughout the state.

We encourage farmers to increase minimum tillage and no-till practices on land that is row cropped as an effective method of curtailing soil erosion.

We believe that soil conservation district commissioners should be the governing body of any watershed district established to administer soil conservation programs.

Any eligible elector residing in a soil district is eligible to be elected to the office of soil district commissioner, except that no more than one commissioner shall be elected from any one township. Other governing bodies will be created as more conservation programs are implemented.

We believe that legislation should provide that a majority of the members of any soil conservation governing body be actively engaged in farming.

The "Iowa-Till" program is an appropriation of $600,000 per year. This money is used on a watershed basis.

We urge the expansion of the "Iowa-Till" program to all 100 Soil Conservation Districts in the state of Iowa by dividing the appropriation among all conservation districts and adding it to the cost-share funds. The districts could then initiate "Iowa-Till" by utilizing up to 10% of its cost-share funds, at the discretion of the soil conservation district commissioners, as an incentive for conservation tillage programs.

Land use

Ownership of property by private citizens is a fundamental part of our political and economic heritage.

The need for regulations restricting the use of farmland varies greatly in Iowa.

We believe the preservation of agricultural land can best be accomplished at the local level. Counties should have the authority to develop their own plan. Counties should also have the option of determining if a land use plan should be adopted in their county. Use of existing zoning authority and procedures will reduce the cost of administration.

STATEMENT OF DAVE KOZISHEK, VICE PRESIDENT, STATE OF IOWA NATIONAL FARMERS ORGANIZATION

Mr. Chairman, I am Dave Kozishek, Vice President of the State of Iowa NFO. I own a grain producing farm and live at Williamsburg, Iowa.

First let me thank you for arranging this opportunity to present our views. I would also like to express our appreciation of your services in the United States Senate, Mr. Jepsen.

As a producer in this greatest of food producing areas in the world, I want to emphasize that we have two strong interests running throughout our organization.

It would be difficult to decide which is the most important to our farm families so we work hard at each of them—bargaining for better prices on our production, and investment of some of our income in conservation of soil and water for our children and the others who are to follow us in stewardship over the land. I am sincerely convinced that every farm family who owns land or even the tenants who look forward to the time when they will own their land, will make every effort to maintain its productivity if they have fair prices and a chance to pay for the needed conservation practices.

So, we would appreciate your efforts on farm legislation that would improve our prices and we want to work with you in developing better conservation policies to be followed in the Department of Agriculture.

Let me turn now to another aspect of our nearly uniform interest in conservation of land and water, even as we use these resources annually to produce about 10 billion bushels of grain and other important food commodities each year. We have had various conservation plans and programs that were first developed more than 40 years ago and our costs of production have risen as you well know. The cost of operating our government at all levels has also increased substantially. As we have been put on the spot, so to speak, by the OPEC nations from whom we must buy oil and face various other difficulties, commonly labeled inflation, unemployment, unwarranted high interest rates and other major expenses, we have all been called upon to re-examine our budgets and our methods of doing business.

I feel it is proper that we take a moment to examine what has been done since the Congress enacted the Soil Conservation and Domestic Allotment Act in 1936. First, people had to be made aware of the need, and there is very little left to be done in this area. On every street corner or coffee shop or community gathering, one can hear conversations that the rape and waste of our soil and water must stop; that we can no longer afford to use two bushels of top soil to produce one bushel of corn; and that we must not continue to export our top soil with our grain at a price that does not cover the cost of producing the grain.

Extensive work has been done on typing of soils, analyzing grades and slopes and determining what practices are needed and practical. A lot of good work was done in building terraces and ponds for both water and soil control, establishing wind breaks to protect fragile soil from wind erosion, and in some areas tree belts have been established and cultivated. This was done in a period of time when farm prices were at a more profitable level and farmers felt they could use some of their profit with the aid of government's cost sharing programs to do some of the needed work.

More recently it seems we have slipped backwards. As world markets cry out for more U.S. grain, even though most of it is sold for less than a fair price, farmers have abondoned crop rotation programs, bull dozed out shelter belt trees and fence rows to accommodate the larger machinery now available. The need for roughage crops that work so well in a crop rotation plan has diminished due to the livestock industry being concentrated in the large corporate feed lots.

So we know the problems and we know how to cure them, but it will take a lot of money, and a big question is "who is going to pay for all of it?" Of course, the farmers should pay their share, but we must realize that any farmer is only on the land for one generation. Then the farmer is gone, but the land remains for the use of future generations. So we feel that anyone who eats the produce from our land, including foreigners, has a vested and vital interest in preserving the productive capacity of our soil and water resources.

In conclusion Senator Jepsen, we feel that first farmers must have selling prices that will return their cost of production plus a profit so they can bear their fair share of the cost. The federal government should be a partner in supplying funds and technical assistance, and the notion of an import tax, earmarked for conservation, should be given serious consideration in the Congress.

Senator Jepsen, again we thank you for making this time available to us to express our views on this far-reaching subject. The leaders and members of the National Farmers Organization are vitally interested in a healthy agriculture and a prosperous country. We invite your office to contact us here in Corning at our National Headquarters Office or contact Chuck Frazier at our Washington Office at any time you feel we can make a contribution to our great agricultural industry.

STATEMENT OF VIRGINIA ORMAN, THE PATHFINDERS R.C. & D., KEOTA, IOWA

My name is Virginia Orman. My residence is Keota, Iowa. I was appointed to serve on Skunk Basin Advisory Committee. I have been a circuit rider for Area XV Regional Planning Commission, where I served the sixteen cities in Keokuk County. I serve as secretary of the Pathfinders Resource, Conservation and Development, and Keokuk County R.C. & D. I am a city clerk and have served ten years in Hedrick and two and one half years in Keota.

In response to the Soil and Water Resource Conservation Act: we need to encourage the groundwork for new ideas about the kind of conservation programs that Americans will need to keep up with and the demands on soil and water resources.

Under the Interagency Agreement for Rural Water and Sewer Projects, EPA, FMHA, EDA, and CSA, must be encouraged to coordinate their efforts to improve the delivery of Federal and State Water and Sewer Programs to rural and semi-rural communities.

We urge a regular exchange of information among the agencies involved in funding projects. We urge the facilitating of application and disbursement of funds for rural water and sewer projects and informing communities of the range of funding and other assistance available to them.

In the area of physical development, the highest priority of each community, shall be to provide a dependable and safe water system. Eleven of the sixteen cities in Keokuk County have a municipal water system. This leaves 697 persons or 9.3 percent of the urban population still utilizing individual wells. Only five municipalities offer sanitary sewers for liquid waste disposal. Leaving 29.32 percent or 2,262 persons without the service.

Two Measure Proposals were presented and approved at Executive Council meeting of Pathfinders R.C. & D.:

(1) 107-009 Keokuk County Water District—Feasibility Study. Benefit—Safe, Quality and Quantity of drinking water. Develop areawide water plan for rural areas by 1985.

(2) 107-010 Keokuk County Liquid Waste Systems—Feasibility study for safe disposal of liquid waste. Benefit—Economic and practical system for liquid waste.

We have four municipal wells in Keokuk County that are a withdrawal from the Jordan Acquifer. Radium and other pollutants in our city water supply has made monthly analysis compulsory. These cities have been made aware that another source of water withdrawal shall be provided by 1985.

Grass Root meetings have been held to inform the public, elect a steering committee, elect officers, hold meetings to explore the need for rural water. We will hold township meetings this fall of 1981 to determine the need for rural water that will be a source for safe, good quality and adequate quantity of drinking water.

Assisted by sponsoring agencies, the steering committee is making a survey to create a public awareness of what is available through rural water systems.

The Skunk River bisects Mahaska and Keokuk Counties; and the South English River in the northern part of Keokuk County. In many instances, the ground water is of poor quality. Individual wells, municipal wells, reservoirs, rivers and rural water facilities are used for domestic purposes. Farm ponds are scattered through-out the area, for stabilization of erosive grades, livestock water and recreation.

We urge the cooperation from funding agencies to consider the need to develop a county-wide water and sewer plan for our rural areas in Keokuk County by 1985.

As new problems present themselves, as changes in policy or procedure become advisable, as objectives are realized and new ones established, the Soil and Water Resource Conservation Act must grow, be alive and keep current with the demands for conservation of our natural resources.

DEWITT, IOWA, *August 17, 1981.*

Senator ROGER W. JEPSEN,
Davenport, Iowa.

DEAR SENATOR JEPSEN: I would like to make some suggestions in regards to soil and water conservation.

It seems to me financing is the stumbling block and give aways are not the answer.

Low interest loans, or a system implemented like your R.E.A. loans would make more money available. It would support itself.

If farmers ask for tax money and financing the public condemns him. A loan is a crutch to help him stand up and help others. If the farmer can manage soil and water he can produce abundantly and it helps everyone.

Grants or subsidies tend to make the public resentful and bitter. A loan makes a person invest for his future and where it does the most good. The man that invests in conservation practices will reap the profits in the future. Money loaned is money used for profit and to fill an obligation. Grants or subsidies in some

instances is used and abused, lets feel obligated and independent. Get your farm and conservation plans.

Our subsidy and grant systems have helped some conservation but in our district the farmers that can afford to finance on their own are reaping the profits. We need aid or help for the person that needs financial assistance to get started. He can get help if he can get a low interest loan for a project instead of a grant or subsidy after spending 25 percent or 50 percent that he can't afford or is unable to furnish.

The young man that needs help stands little chance of getting subsidized or gratuities if he can't get started.

We're getting conservation on some land, but I'm sure the person that can't get started could be helped and make a larger improvement with loans that he can pay back with the profits of conservation.

Respectfully yours,

ROBERT E. PETERSEN.

AUGUST 19, 1981.

Hon. ROGER JEPSEN,
United States Senator, Iowa.

DEAR SENATOR JEPSEN: As we all know saving our soil is most important to future generations. Your public comments on this subject should go a long way in again bringing about farmer and non-farmer awareness of this truth. Excerpts from your speeches aired on the radio are most welcome. They encourage every individual to do his part on his land or on the land he works.

I think incentive payments for no-till farming or conservation practices are a more satisfactory method than penalizing for conventional farming can ever be. The latter would be too difficult to administer. Many are not sold on no-till and minimum-till, but with funds spent on improving this aspect, the practices can be improved further. Money needs to be allotted to the right sources so additional work can be done. Chemical companies are improving sprays and implement manufacturing companies are trying to keep up-to-date with the needs of the farmer.

Federal funds are necessary to pay for experimentation on state agricultural farms, and also to provide incentives at the local level in cost share payments. Perhaps not enough money is spent to publicize the availability of these programs, and this is why farmers do not apply.

The need in soil conservation all over our country is tremendous. We appreciate what you are doing and ask that you continue. Perhaps getting the go-ahead from above or the top-of-the-ladder will be noticed to a greater degree than any slight push I as an individual farmer can give at the bottom.

Very sincerely yours,

RONALD ADRIAN,
Clinton Co. Soil Commission.

AUGUST 20, 1981.

DEAR SENATOR JEPSEN: A few comments that I would like to send along for the soil and water conservation hearing on August 31, 1981, as follows:

For thirty years or more the Soil Conservation Service has been trying to control soil erosion by using terraces, contouring and strip cropping. Terraces are very expensive to construct and hard to farm so haven't caught on. Contouring is very effective and will in some instances reduce erosion up to 20 percent and should be part of an intensive campaign along with minimum and no-till.

Strip cropping is no doubt most effective but the farmer must have need for hay and small grain which does not fit into many farming operations.

In my estimation we need to take a drastic step forward and legislate against fall tillage of any kind on soy bean stubble and all fall use of the moldboard plow. (These two practices set the stage for most of the wind erosion during winter and spring, and greatly increase water erosion.)

I believe any one who uses either of the above practices should not be allowed to use chemicals or commercial fertilizer. If they do use either they could be subject to $5,000 fine and be ineligible to receive any government price supports or loans.

I don't feel this is working anything mandatory. The farmers would have a choice.

Tax incentives for no-till and other such practices would tend to encourage these practices.

For a long-term approach, the marginal land put under cultivation in recent years should go back to grass. Only cattle and sheep can utilize grass. Beef and lamb consumption should be promoted extensively in the U.S. and also in foreign countries. If we could fill the demand by exporting our beef and lamb the prices should rise to where profit would increase livestock numbers and thus millions of acres of marginal land would go back to grass and thus eliminate soil erosion.

Thanks for allowing my comments to be part of this hearing.

Sincerely,

DARRELL BROWN,
Cedar County Farmer.

STATEMENT OF WILBERT AND LEOLA BEHRENS

How to reduce soil erosion to tolerable limits?

Money talks!—on the farm as well as in any industrial endeavor. The labor force strikes to make ends meet. If farmers are to work to save the soil, government (or someone) is going to have to make it worth their while. At a time when we are paying more and more for the manufactured items we use to produce our crops and in return get less and less in proportion for that crop. You really can't expect a farmer to spend the extra time, effort and money to conserve the soil. Taxes on his land plus his production costs are so high that he has to get every dime he can out of each acre. Again—money talks—make it worth his while—give substantial tax breaks on no-tilled land, minimum tilled land leaving 3000 lb. of residue on the surface and so on.

Land should be in the hands of people who care about that land. When you have land owned by an oil company or some other big money group, managed by a college educated person who has very little practical knowledge of the land and then actually worked by a custom farmer who's main objective is to get his machine paid for and also make a profit to support his family, you do not have a good combination for "saving the soil." You have to really care about the land. An owner-operator residing on his own property is the best possible situation. Much larger homestead exemptions might be an answer. And then make it possible for land to stay in families by doing away with estate and inheritance taxes where land is to be passed on to family members. Pride in ownership and caring for the land must be restored.

There is a great deal of land being planted to row crops which should not be farmed. Too much slope should remain in permanent pasture or woodland and then should be taxed at a rate which would be in line with the return from that land. If it doesn't produce should it be taxed at the same rate as if it returned a profit?

It seems to me as though the more I save my soil and improve my land (I've been practicing contour farming, no-till, strip-cropping, improved permanent pasture, grass waterways and headlands, planting windbreaks and wildlife refuge for 21 years) the more I am taxed for it each year. At the same time my neighbor who does not practice conservation and whose soil is winding up in the road ditches probably pays no more taxes than I do. Is this what it is all about? This is penalizing a person for improving his land.

Get your additional tax dollars from the man who clean tills his ground in the fall and lets it lay bare for the elements to erode.

CEDAR COUNTY SOIL CONSERVATION DISTRICT,
Tipton, Iowa, September 9, 1981.

ROGER JEPSEN,
U.S. Senator,
Davenport, Iowa.

DEAR SIR: Thank you for the opportunity to provide inputs toward a major national problem, that of Soil Erosion.

The overriding reason for soil loss is "economic"—the demand for grain for export as well as domestic use, and the necessity of farmers to meet financial obligations due to the high cost of land and production inputs, such as machinery, fertilizers, pesticides, and seed. These demands encourage more land to be tilled and thus, exposed to erosion from wind and water. Much of this land is too fragile to be continuously row cropped without severe damage.

The use of conservation or reduced tillage equipment such as chisel plows and no-till planters are great assets in increasing the amount of vegetative material left on the surface after the previous crop has been harvested. This material reduced the amount of erosion by protecting the soil from the direct assault of wind and water, thus, preventing or reducing its movement.

This system is not without problems. The crop material left on the surface often enhances the development of insect and disease factors that can attack the following crop. Weed control can also be inhibited by the increased residue. Fertilizer placement can also be a hindrance to maximum yields by not getting the plant food deeper into the root zone, especially in very dry years. These problems can and are being overcome by innovative farmers.

We feel that it is very important to increase research in these areas, both by the private and public sectors. We believe that if reduced tillage system can be demonstrated to be practical as well as profitable to the producer, its acceptance and expanded use will come much faster than by a Federal Bureaucracy dictating absolute policies.

The cost of erosion control could be reduced if reduced tillage systems were more universally accepted. The construction of terraces and other structures are very expensive and resisted by many as being in the way. These structures should not be abandoned but more acres could be protected faster with increased emphasis on conservation tillage.

We also feel grain exports would be complimented by expanding our promotion of red meat exports. This policy could have positive influences of soil erosion by encouraging a return to crop rotations and restoring many acres of fragile land to permanent pasture. It could also create many jobs in the meat packing industry to process the meat, thus, helping the entire economy.

In conclusion, we emphasize our opposition to an absolute Federal Bureaucracy to try to solve this problem. We feel that local control can more effectively deal with the special problems that are found in individual areas, and the funds can be used more efficiently without passing it through many levels of government before it gets to where it is to be used.

Respectively,

JOEL BROWN,
Commissioner, Cedar County Soil Conservation District.

U.S. DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
Wapello, Iowa, September 4, 1981.

Senator ROGER W. JEPSEN,
Davenport, Iowa.

DEAR SENATOR JEPSEN: This responds to your request for written testimony concerning a portion of your forthcoming, farm bill, following our conversation of August 31, 1981 in Columbus Junction, Iowa.

As Refuge Manager of one unit of the National Wildlife Refuge System, I believe the U.S. Fish and Wildlife Service is concerned about the detrimental effects of soil erosion on fish and wildlife habitat values, as well as the loss of agricultural land in this country. I should point out I am only able to relate the concerns of your bill as it may affect this individual refuge. The U.S. Fish and Wildlife Service administration should be consulted for their views regarding national policy as it relates to all National Wildlife Refuges and the effects your bill may have on them.

The Louisa Refuge, not unlike many other National Wildlife Refuges nationwide, lies in a flood plain with numerous water bodies contained within and near its boundaries. The elimination of soil loss through erosion on refuges is of paramount importance. The Louisa Refuge is comparatively flat and consequently there is not a severe erosion problem. The use of chemicals on wildlife refuges has come under severe scrutiny in recent years as more information becomes available on the effects these chemicals have on the nation's fish and wildlife resources. It is evident that we can not be too careful in the types or uses of agricultural chemicals. Most of these chemical pesticides are restricted in their use or applicability so as to pose little or no threat to wildlife or fish on refuges.

As previously discussed with you, the primary function of this refuge is to provide food and habitat for migrating ducks and geese. Two endangered species, the American Bald Eagle and Peregrine Falcon, use the refuge during certain periods

each year. Much of the refuge is annually flooded to provide habitat for migrating waterfowl. A secondary benefit of the water areas are the fishery resources utilized by the public. Our efforts in the area of soil conservation and some concerns over the no till farming requirement for federal lands are outlined below.

Currently the refuge farming program operates under minimum till soil conservation practices. The cooperators farming on the refuge are required to leave all crop residue on each field until spring planting. No fall plowing or tillage or the use of moldboard plows is allowed. Each field is required to have at least a fifteen foot grass border around it to help prevent soil loss. We are looking at other methods of reducing energy and chemical use in our farming program by evaluating the use of soil inoculants as a means of replacing or reducing petrochemical fertilizers. Consideration is being given to biological farming methods where no chemicals are used, and weed control through mechanical means is encouraged when possible.

The portion of the referenced bill that would require no till farming on all federal land could have serious repercussions where fish and wildlife values are concerned. No till farming requires more chemicals to be used in order to replace cultivation as a weed control. One of the chemicals required for no till farming, Paraquat, has been shown to be highly toxic to certain fish and aquatic organisms. No till farming would reduce or eliminate any options which are now incorporated into an active farm management program.

We feel there are other less severe alternatives to conserving our soil on National Wildlife Refuges and other federal lands. Some of the areas currently being pursued have been touched on above, and you can be assured we will continue to keep an open mind toward new methods of eliminating soil erosion.

Sincerely,

O. T. Fears III,
Refuge Manager.

Statement of Edwin Augustine, Washington County Soil Conservation District Commissioners

Conserving soil and preserving its food producing capacity should be one of the highest priorities of the American people. It has been stated a number of times that the food producing ability and capacity of the American farmer is worth several divisions in the defense of the free western world. Communist nations recognize that their food supply line would be jeopardized if a shooting war with the United States were to break out.

The efforts of the Soil Conservation Service, the United States Department of Agriculture and local Soil Conservation Districts to conserve soil are to be commended. Cost-sharing funds to assist in the awesome task of soil conservation have greatly enhanced the preservation of soil for the generations of American food producers who will utilize this most precious natural resource to produce food.

I think most U.S. Senators and Congressmen recognize the role of the farmer in preserving peace and stability in our own world today. I also believe most Americans understand that the tremendous cost of soil conservation should be borne by the "public" because the "public" benefits in many ways from good soil conservation. Clean water in streams and lakes, enhancement of aquatic recreation and improved environment for fish and wildlife are but a few of the "public" benefits resulting from the application of accepted soil management practices and techniques.

In order to further the application of permanent soil conservation structures (tile inlet terraces, . . .) a new tax law must be approved by the United States Congress that will allow a 50 percent investment tax credit on permanent soil conservation structures when "cost-share" funding is not involved. This would allow soil conservation structures to be constructed when there is demand for this type of work in profitable years and are looking for investments that will reduce their tax liability. This would put soil conservation on an equal footing with other capital investments that a farmer makes when incomes are on the profit side of the accounting ledger.

Currently, only the tile and the installation of the tile is eligible for investment tax credit. This would allow the earthwork necessary for tile inlet terraces to also qualify for investment tax credit.

No government appropriation would be required. Soil conservation can be advanced much more rapidly by allowing such a change in our tax laws.

STATEMENT OF STEPHEN J. MARTIN, DISTRICT CHAIRMAN, LINN COUNTY SOIL CONSERVATION DISTRICT

The need to protect our soil and water resources is becoming more critical each year. Millions of acres of land have already lost their original layer of fertile topsoil. With each passing year of intensive, row-crop farming, more topsoil is washed away causing problems downstream with water pollution and sedimentation of lakes and rivers.

Through the years, soil erosion has not been generally recognized as a severe problem, even by farmers. Each passing, heavy rain will cause some sheet erosion and wash away many tons off each acre. However, this type of erosion is difficult to see. Even when there are severe losses, most people discount these losses by saying "that only happens once every twenty years." More fertilizer is then applied to try to replace the loss of topsoil.

As commissioners of the Linn County Soil Conservation District, we believe that more effort must be made to reduce soil losses to acceptable levels.

The average county in Iowa has between 1000 and 2000 farms. Yet, the staff of the average soil conservation district is two or three persons. To provide individual services to each of those farms is impossible. So staff needs to be increased.

We believe the federal government should increase funding to provide more incentives for soil conservation projects. As long as the federal government policy is to provide cheap food for the people, farmers and landowners are squeezed financially and many cannot install needed soil conservation practices. Therefore, the public should pay a greater share of the cost.

We like the green ticket approach, where tax breaks are given to the landowner for having his soil loss under control. This type of program, if administered right, should provide enough incentive to most landowners to install needed soil conservation measures. Also, the green ticket approach would remove the threat of mandatory soil conservation. A green ticket, given out to farmers who keep soil losses to acceptable limits, should be publicized and made known to neighboring farmers. This would provide additional incentive for them to treat their land with conservation practices and receive a tax break and a green ticket.

O